



Improving and High-Performing Schools in Wyoming: Cross-Case Analysis and Ten School Reports

Prepared for the Wyoming Legislature Select Committee on School Finance Recalibration

Kathleen Mulvaney Hoyer

Activate Research, Inc.

Partner to Picus Odden & Associates

December 1, 2020

Table of Contents

Improving and High-Performing Schools in Wyoming: A Cross-Case Analysis	1
Big Horn Middle School	18
Clearmont K-12	30
Colter Elementary School	42
Greybull High School.....	53
Laramie High School	65
Lovell High School	78
Natrona County High School.....	90
Sagebrush Elementary School	104
Stagecoach Elementary School.....	116
Wind River High School.....	128

Improving and High-Performing Schools in Wyoming: A Cross-Case Analysis

Prepared for the Wyoming Legislature Select Committee on School Finance Recalibration

Kathleen Mulvaney Hoyer

Activate Research, Inc.

Partner to Picus Odden & Associates

December 1, 2020

Introduction

This document synthesizes information from ten case studies of Wyoming schools that have improved or demonstrated consistently high student performance in recent years as measured by proficiency on state summative assessments. Taken together, these case studies inform the recalibration of the Wyoming Education Resource Block Grant Model. The studies offer insights into how the selected schools have leveraged their resources to foster large improvements in, or high levels of, student performance (i.e., double-digit gains in percentages of students who were at or above proficiency or consistently high percentages of proficient students – such as 80 percent or more of students at or above proficient in multiple years).

The following sections of this chapter describe the methods used to conduct the case studies, outline key findings from the studies, and demonstrate how staffing levels and strategies aligned with the EB Model (as described in earlier chapters of the Picus & Odden recalibration report). The information gleaned from these studies provides state legislators with information relevant to costing out the basket of goods and services to which Wyoming students are constitutionally entitled.

Methods

Site Selection

In February 2020, the Wyoming Department of Education provided the study team with multiple years of school-level assessment results for schools throughout the state.¹ Because Wyoming recently changed its summative assessment, the data came from different assessments over time (e.g., the former Proficiency Assessments for Wyoming Students [PAWS] and the current Wyoming Test of Proficiency and Progress [WY-TOPP]).² These data indicate the percentages of students who achieved proficiency or above for school years 2013-14 through 2018-19 for high school assessments and for school years 2016-17 through 2018-19 for grade 3-8 assessments.³ The research team calculated each school's percentage point change in the percentage of students at or above proficiency between the first available year of data (2013-14 for high school assessment data; 2016-17 for grade 3-8 assessment data)⁴ and the 2018-19 school year.

To be eligible as a potential case study site, a school had to demonstrate improvement or consistently high student performance. That is, eligible schools had to demonstrate large (double-digit, if possible) percentage point changes in the percentages of students who were proficient or advanced on state assessments or demonstrate consistently high percentages of students who were proficient or advanced. The team reviewed these test score data alongside other relevant characteristics of the

¹ Only those schools with an *N* of ten or more students (including lookbacks to prior years) have data for each year. A “lookback” uses information from prior-year students when the *N* for any particular indicator is smaller than ten.

² While changes in test administration make cross-year comparisons more difficult, using data from multiple assessments allowed for review of scores over a longer period.

³ Wyoming's 2019 *School Performance Rating Models Implementation Handbook* describes the computation of a school's overall achievement score as a metric “that represents student performance on the state assessment...in all tested grades and content areas. ... [It] is the percent of proficient or above test scores in math, English and language arts (ELA), and science ... rounded to a *whole number*, for all fully academic year (FAY) students” (p. 5).

⁴ One exception to this pattern was for Colter Elementary School. Given a major change in its structure between 2016-17 and 2017-18, the study team reports 2017-18 as the base year for its school improvement comparison.

schools to begin to identify potential candidates for the study. Specifically, the team selected high-performing schools that also met the following criteria:

- *Geographic diversity.* We selected school sites in Wyoming’s major/minor cities, more rural areas, and areas with large Native American communities.
- *School level diversity.* We selected a mixture of elementary schools, middle schools, high schools, and combined schools.
- *Size diversity.* We selected both small schools and larger schools.
- *Demographic diversity.* We selected schools that were diverse in terms of student demographics using information on school-level eligibility for free and reduced-price lunch (FRPL) as a proxy.

Based on these criteria, the study team selected a list of potential schools for the recalibration study. After review and input from Wyoming Department of Education personnel, the team made the final selections.

The final sample consisted of ten schools (Table 1). The sample included two large high schools (Natrona County High School and Laramie High School) and three multi-section elementary schools (Colter Elementary School, Stagecoach Elementary School, Sagebrush Elementary School). Four of the five remaining schools were small (i.e., ranging in size from 83 to 136 students in 2019-20), and the fifth of these, Lovell High School, had 213 students. The percentage of students eligible for free or reduced-price lunch in 2019-20 ranged from a low of 12 percent at Big Horn Middle School to a high of 45 percent at Sagebrush Elementary School. Similarly, the percentage of students at each of the schools designated as “at-risk” under the state’s funding model (that is, the unduplicated count of students eligible for free or reduced-price lunch, English language learner [ELL] students, or mobile students in grades 6-12) ranged from 16 percent at Big Horn Middle School to 45 percent at Sagebrush Elementary School. Figure 1 shows the locations of the ten case study districts.

Table 1. Characteristics of case study sites

School name	Percentage point (pp) change in students at or above proficient ^a	Percentage of students at or above proficient in 2018-19	Location	School size in 2019-20	School-level FRPL in 2019- 20	“At-risk” percentage in 2019-20
Elementary						
Colter Elementary ^b	14 pp	70%	Jackson	345	13%	20%
Sagebrush Elementary ^c	5 pp	86%	Sheridan	341	45%	45%
Stagecoach Elementary	14 pp	61%	Rock Springs	301	36%	39%
Middle						
Big Horn Middle School	19 pp	79%	Big Horn	108	12%	16%
High						
Greybull High School	26 pp	61%	Greybull	136	33%	37%
Laramie High School	14 pp	62%	Laramie	1,048	19%	21%
Lovell High School	26 pp	68%	Lovell	213	39%	42%
Natrona County High School	22 pp	55%	Casper	1,737	36%	38%
Wind River High School	35 pp	58%	Pavillion	108	41%	42%
K-12						
Clearmont K-12	15 pp for grades 3-8 ^d	58%	Clearmont	83	29%	36%

^a For grades 3-8, these changes are between 2016-17 and 2018-19. For high school, these changes are between 2013-14 and 2018-19. Because Wyoming changed its summative assessment in recent years, data come from both the PAWS and the WY-TOPP assessment systems.

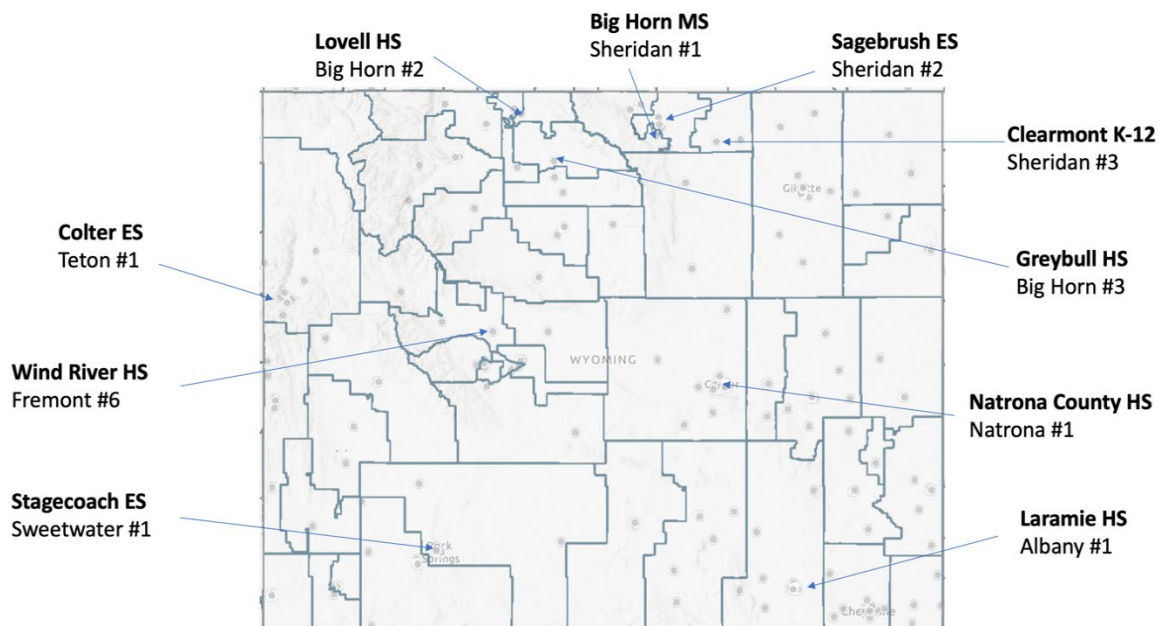
^b Percentage point change for Colter Elementary School is from school year 2017-18 to school year 2018-19 due to a change in the school’s structure and enrollment between 2016-17 and 2017-18.

^c Sagebrush Elementary School is included in the sample given its consistently high percentage of students at or above proficient (above 80 percent in each of the past three years) as well as its high percentage of students eligible for FRPL.

^d High school assessment data for Clearmont K-12 were not provided before 2017-18. However, the school evidenced improvement between 2017-18 and 2018-19 for high school students; that is, there was a 27 percentage point change between these two years.

Source: Assessment data provided by the Wyoming Department of Education. School enrollment and FRPL eligibility accessed through the Wyoming Department of Education website and provided by school personnel. Information for calculations of “at-risk” percentages provided by the Wyoming Legislative Service Office.

Figure 1. Case study sample school districts



Source: Author additions to map retrieved from <https://nces.ed.gov/programs/maped/ACSMaps/>.

Data Collection and Analysis

Data for the case studies came from two main sources: (1) a review of documents provided by school officials or available online and (2) individual and focus group interviews held virtually via Zoom that occurred in spring and fall 2020 with members of school and district staff. Study participants included a range of personnel including school administrators, core teachers, elective and career and technical education (CTE) teachers, special educators, intervention teachers, instructional facilitators, paraprofessionals, pupil support personnel, and district administrators (including but not limited to those recommended for inclusion in the study by school/district leadership as well as the co-chair of the Select Committee on School Finance Recalibration). Across all ten schools, the study team conducted 54 semi-structured virtual interviews or focus groups with 197 participants (Table 2). Interview and focus groups ranged in length from 30 minutes to 75 minutes. Two members of the study team were present on each Zoom session to take detailed notes on each of the interviews or focus groups.

Table 2. Number of interviews/focus groups and number of participants

School name	Number of interviews and focus groups	Number of participants
Elementary		
Colter Elementary School	9	35
Sagebrush Elementary School	7	30
Stagecoach Elementary School	4	15
Middle		
Big Horn Middle School	4	12
High		
Greybull High School	4	11
Laramie High School	3	16
Lovell High School	4	19
Natrona County High School	5	22
Wind River High School	4	14
K-12		
Clearmont K-12	10	23
Total	54	197

Source: Author calculation from project documents.

The study team used NVivo qualitative data analysis software to analyze the interview and focus group data. Development of this chapter proceeded in two stages. First, the team analyzed data to create ten individual school reports (see the end of this document). Second, the team analyzed these ten reports to develop this cross-case analysis. The analysis for individual school reports relied upon a deductive coding process, for which the codes matched the topics on the semi-structured interview/focus group protocol. These codes covered the topics of school context, student performance, staff, school schedule, approaches to teaching and learning, and professional development. After data analysis, a member of the study team drafted a series of reports with sections that aligned with these broad topic areas. School principals then had an opportunity to review their schools' drafts to ensure accuracy.⁵ Analysis for the cross-case analysis (the second stage of analysis) followed a more inductive route, wherein study team members identified themes across the case study schools.

Findings

The following paragraphs detail major themes that emerged across the case study sites on two main topics: staffing and strategies.

⁵ Seven of ten principals provided feedback on their schools' reports. The study team incorporated this feedback in the revised reports.

Staffing

As described in Chapter 3 of the 2020 Picus Odden recalibration report, the EB funding model relies mainly – though not exclusively – on allocations for school staff. As such, the case studies investigated staffing levels at each of the ten schools and explored how these schools employed staffing resources for a variety of teaching and support positions. The sections that follow describe findings related to each schools' levels of (a) core and elective teacher positions, (b) instructional support positions for both teachers and students, and (c) pupil support positions (specifically, counselors and nurses).

Core and elective teacher staffing levels and salaries

Across the study schools, levels of staffing for core and elective teachers in the 2019-20 school year varied, particularly at the secondary level (Table 3). In this study, for elementary schools, core teachers included classroom teachers who were either in self-contained or departmentalized grade-level classrooms. For secondary schools (i.e., middle and high schools), core teachers included teachers in the areas of English language arts (ELA), math, science, social studies, and world language. Staffing levels for specialist/elective teachers (measured as the proportion of specials/elective teachers relative to core teachers) ranged from 13 to 20 percent in the three multi-section elementary schools in the group, the higher percentage being what both the Legislative and EB Models provide.

High schools included in the case studies staffed electives (including career and technical education) at 43 to 66 percent of core. Interestingly, the range is much narrower if it does not include Laramie High School. Without including Laramie High School, the ratio of elective teachers relative to core teachers in the case study secondary schools ranged from 61 to 66 percent. Importantly, both the Legislative Model and the EB Model generate approximately 33 percent elective teachers at the high school level. The Legislative Model generates 33 percent for middle schools, as well, whereas the EB Model generates 20 percent at the middle school level.

Table 3. Core and elective teacher staffing in case study sites, 2019-20

School name	Number of core teachers	Number of elective teachers	Elective teachers relative to core teachers
Elementary			
Colter Elementary School	20.0	4.0	0.20
Sagebrush Elementary School	19.0	2.5	0.13
Stagecoach Elementary School	16.0	2.8	0.18
Middle			
Big Horn Middle School	4.0	2.3	0.58
High			
Greybull High School	8.0	5.1	0.64
Laramie High School	42.0	18.2	0.43
Lovell High School	9.0	5.5	0.61
Natrona County High School	55.3	36.6	0.66
Wind River High School	7.5	4.8	0.64
K-12			
Clearmont K-12	8.0	3.9	0.49

Note: For elementary schools, core teachers included classroom teachers in either self-contained or departmentalized grade-level classrooms. For secondary schools, core teachers included teachers in the areas of English language arts, math, science, social studies, and world language. Elective teachers included career and technical education teachers.

Source: Conversations with school staff.

Average core class sizes for the three multi-section elementary schools in the sample, which were similar in size to the model prototypical elementary school, ranged from 17 to 19 students (Table 4). These average class sizes were higher than those provided by the Legislative Model and very similar to what the EB Model provides for K-5 schools.⁶

Table 4. Average core class sizes for case study elementary schools, 2019-20

School name	Average core class size
Colter Elementary School	17.25
Sagebrush Elementary School	17.95
Stagecoach Elementary School	18.81

Note: For elementary case study schools, average core class size was calculated by dividing number of students in school by number of core teachers in the school. Elementary school core teachers included classroom teachers in either self-contained or departmentalized grade-level classrooms.

Source: Enrollment numbers came from the Wyoming Department of Education, "Fall Enrollment Summary By School By Grade for School Year 2019-20." School staffing numbers came from conversations with school staff.

⁶ For additional information about average core class sizes in the case study elementary schools – including information on average core class sizes in kindergarten through grade 3 – see the individual school reports in the appendices.

Average English language arts (ELA) and math class sizes for the secondary schools in the case study sample ranged from 12 to 23 students, and ELA and math classes in the small K-12 school averaged 7.02 students (Table 5).⁷ At the high school level, larger case study schools had larger average ELA and math classes (i.e., Natrona County High School with an average of 21 and Laramie High School with an average of 23). Thus, the average ELA/math class size in the larger schools were similar to (or slightly higher than, in the case of Laramie High School) the class sizes provided in the Legislative Model.

Table 5. Average English language arts (ELA) and math class size in case study secondary schools, 2019-20

School name	Average ELA/math class size
Middle	
Big Horn Middle School	17.22
High	
Greybull High School	12.35
Laramie High School	22.80
Lovell High School	17.07
Natrona County High School	21.06
Wind River High School	12.69
K-12	
Clearmont K-12	7.02

Source: Calculations provided by the Wyoming Department of Education to the study team. Data came from analysis of combined wde684 student, wde684 section, and wde638 course data sets.

In most cases, particularly at the middle and high school levels, average 2019-20 salaries for teachers in the case study schools' districts were lower than corresponding average salaries in the state of Wyoming in general (Table 6). Specifically, at the middle and high school levels, all six case study schools' districts had lower average teacher salaries when compared to statewide averages. Most were only slightly lower, though the average teacher salary for a high school teacher in Albany County School District #1 (which includes Laramie High School) diverged more noticeably from the statewide average.

Average elementary teacher salaries in Sheridan County School District #2 (which includes Sagebrush Elementary School) and in Sweetwater County School District #1 (which includes Stagecoach Elementary School) were similar to the statewide average elementary school teacher salary, though Sheridan County School District #2 was slightly higher and Sweetwater School District #1 was slightly lower. As expected, average elementary teacher salaries in Teton School District #1 (which includes Colter Elementary School), were higher than average elementary teacher salaries statewide. This is likely a

⁷ For secondary schools, this document reports average ELA/math class sizes to align with class sizes as reported in the Continued Review of Educational Resources in Wyoming (CRERW) report. Average 2019-20 class sizes have not yet been published in the CRERW report; thus, the numbers reported in this document may vary from 2019-20 CRERW numbers if any data change between the publication of this report and the publication of the next CRERW report.

function of Teton County receiving the largest regional cost adjustment (RCA) among the 48 districts in the Wyoming funding model.

For Sheridan County School District #3 (which includes Clearmont K-12, the only K-12 school in the study), average elementary and high school teachers' salaries were lower than the corresponding averages statewide.

Table 6. Average teacher salaries in case study districts for school level of case study school, 2019-20

School name	District	Average teacher salary in district for sampled school's level	Average teacher salary in Wyoming for sampled school's level
Elementary			
Colter Elementary School	Teton #1	\$77,531	\$60,194
Sagebrush Elementary School	Sheridan #2	\$61,736	
Stagecoach Elementary School	Sweetwater #1	\$59,391	
Middle			
Big Horn Middle School	Sheridan #1	\$61,875	\$63,370
High			
Greybull High School	Big Horn #3	\$63,672	\$64,893
Laramie High School	Albany #1	\$59,983	
Lovell High School	Big Horn #2	\$63,338	
Natrona County High School	Natrona #1	\$64,312	
Wind River High School	Fremont #6	\$64,294	
K-12			
Clearmont K-12 (elementary)	Sheridan #3	\$48,779	\$60,194
Clearmont K-12 (high)	Sheridan #3	\$52,315	\$64,893

Note: The information in this table displays average teacher salaries that are district-wide but level-specific. For instance, the value for Colter Elementary School means that in 2019-20, the average elementary teacher salary in Teton County School District #1 was \$77,531.

Source: "All Staff by Category and District with Average Salaries" database found at <https://edu.wyoming.gov/data/statisticalreportseries-2/>.

Staffing for other instructional positions

This section describes school use of personnel who support instruction – both at the teacher and student levels. In particular, it describes teacher support through the use of instructional facilitators and student support through the use of intervention teachers (also called tutors).

Support for teachers

We found that instructional facilitators were available at seven of the case study schools. Three schools (Laramie High School, Sagebrush Elementary School, and Wind River High School) had school-based staff members who served in a capacity similar to an instructional facilitator, although not all three of the schools used that specific term to describe the staff member. Three schools (Big Horn Middle School, Colter Elementary School, and Greybull High School) reported that teachers received support from

district-level instructional facilitators. Still, despite having access to these district-level personnel, in some of these instances, study participants noted that staffing for instructional facilitators had decreased over time, which had reduced their access to support from these educators. The seventh school with support from instructional facilitators, Clearmont K-12, reported having support from district-level staff members, as well, though due to the school and district's small size, the distinction between the school and the district may not be as clear as in other sites.

Of the three schools that did not report the use of instructional facilitators, one school – Lovell High School – had access to a district-level curriculum director after the loss of building-level instructional facilitators due to budget cuts. The curriculum director provided support around matters of curriculum and assessment but did not provide classroom support or coaching. In the remaining two schools (Natrona County High School and Stagecoach Elementary School), study participants did not report access to or reliance on instructional facilitators. In some of these schools, lack of access to instructional facilitators was a change from prior years. According to staff at one of these schools, losing access to support from instructional facilitators has had a negative impact on the amount and quality of coaching that teachers receive.

Support for students

Case study schools used a variety of instructional personnel to deliver interventions to struggling students during the 2019-20 school year, and they deployed these personnel in strategic ways to increase students' access to extra support to reach standards (as described in more detail below in the section on strategies to provide interventions). Most schools used a mixture of classroom/content teachers, certified intervention teachers, and instructional paraprofessionals. Schools that had intervention teachers often – though not always – used both general funds and Title I funds to support these positions. Five schools (Colter Elementary School, Lovell High School, Natrona County High School, Sagebrush Elementary School, and Stagecoach Elementary School) reported the use of both certified intervention teachers and instructional paraprofessionals. These schools often described a comprehensive approach to intervention, where most instructional personnel – many of whom were certified teachers – provided extra help to support students as they reached standards. Three schools (Big Horn Middle School, Clearmont K-12, and Laramie High School) had no intervention teachers in 2019-20 but did employ instructional paraprofessionals. Two of these three schools (Big Horn Middle School and Clearmont K-12) reported that their staffs would include an intervention teacher the following school year (2020-21), whether funded by general or Title I dollars. One school (Greybull High School) had very limited support from a certified intervention teacher (one period per day) and no instructional paraprofessionals, while the final school (Wind River High School) had neither certified intervention teachers nor instructional paraprofessionals.

Staffing for pupil support positions

While schools often employ a variety of pupil support personnel, two key positions in this area are counselors and nurses. The following paragraphs describe how case study schools staffed these positions in the 2019-20 school year.

All of the case study schools had some access to school counselors, though particular levels varied on a variety of factors (e.g., school size, numbers of “at-risk” students; Table 7). As might be expected, the two largest schools – Natrona County High School and Laramie High School – had the greatest number of counselors (5.5 and 4 counselors, respectively), though due to their large student populations, their

counselor-to-student ratios were still higher than those of the other secondary schools. Six of the other schools, some of them small schools, had a full-time counselor (Clearmont K-12, Colter Elementary School, Greybull High School, Lovell High School, Sagebrush Elementary School, and Stagecoach Elementary School). Two schools (Big Horn Middle School and Wind River High School) had access to half of a counselor's time. It is noteworthy that all of the elementary schools employed counselors, given that the Legislative Model does not provide funds specifically set aside for counselors at the elementary level.

All but one school (Clearmont K-12) had some access to nurses, as shown in Table 7.⁸ Again, the two largest schools had more than one nurse, with Natrona County High School staffing 2 nurses and Laramie High School staffing 1.5 nurses. These two large high schools (along with the next largest high school, Lovell High School) have nurse-to-student ratios similar to those recommended by the EB Model. Two other schools (Sagebrush Elementary School and Stagecoach Elementary School) had full-time nurses. The remaining schools shared nurses with other district schools and, as such, had access to between 0.2 to 0.5 FTE of a nurse's time. Again, as was the case with counselors, the fact that nearly all schools had access to nurses indicates that the schools have deemed these positions particularly worthy of funding, since the Legislative Model does not include funding specifically for nurses.

Table 7. Ratios of counselors and nurses to students in case study schools, 2019-20

School name	Student enrollment	Counselor to student ratio	Nurse to student ratio
Elementary			
Colter Elementary School	345	1:345	1:690
Sagebrush Elementary School	341	1:341	1:341
Stagecoach Elementary School	301	1:301	1:301
Middle			
Big Horn Middle School	108	1:216	1:324
High			
Greybull High School	136	1:136	1:408
Laramie High School	1,048	1:262	1:699
Lovell High School	213	1:213	1:710
Natrona County High School	1,737	1:316	1:869
Wind River High School	108	1:216	1:540
K-12			
Clearmont K-12	83	1:83	not applicable

Note: For those schools that had less than one full-time equivalent for the counselor or nurse, the ratio was calculated by multiplying both sides of the equation by the factor necessary to get the counselor/nurse to 1. For example, Colter Elementary School had 0.5 of a nurse's time for 345 students; multiplying both by 2 leads to a ratio of 1:690.

Source: Enrollment information accessed through the Wyoming Department of Education website and provided by school personnel. Counselor and nurse staffing information provided by school personnel.

⁸ Although Clearmont K-12 did not have a nurse, the school did have 0.5 FTE of a first aid worker.

Strategies

As described in Chapter 2 of the 2020 Picus Odden Recalibration report, the EB Model is based on a school improvement model with several foundational instructional practices. Thus, explorations of case study schools also focused on the ways in which they approached key aspects of teaching, learning, and professional development. The following sections detail major themes across study sites related to instructional practices.

Use of professional learning communities

All ten of the case study schools implemented professional learning communities (PLCs). The elementary schools organized PLCs around grade-level teams. Secondary schools organized PLCs around subject-area teams. In the large high schools (Natrona County High School and Laramie High School), PLCs formed around courses (e.g., a geometry PLC as a subset of a larger math department.) Even in small schools where convening PLCs might have been difficult because teachers were singletons – that is, the only teachers of their subject or grade in their schools – case study participants characterized PLCs as a meaningful source of professional development and a driver for decisions around curriculum, instruction, intervention, and assessment. In some schools, PLCs met during common planning time within the school day. In other schools, especially secondary schools, the PLCs met before or after school. In most of the case study schools, PLCs met formally once per week, though PLCs met more frequently in two schools (Natrona County High School and Stagecoach Elementary School) and less frequently in one school (Greybull High School).

Study participants described PLCs as “very powerful” tools that were “the cornerstone” of professional development in their schools. According to one study participant, “the power is in the process,” by which this educator meant that as teachers worked to develop materials in their PLCs, they were engaging in impactful professional growth. Across schools, teachers reported that they used PLC time to dig deep into student performance data from interim, short-cycle, formative, and other assessments; to unpack standards and develop or identify curricular materials to tie to those standards; to co-create lesson plans and to identify appropriate instructional strategies for use in the classroom; to create common assessments; and to group students for additional support after Tier 1 instruction and identify appropriate interventions for students who struggle to meet standards.

Use of standards-based, vertically aligned curriculum

As described in the previous section, teachers’ work in their PLCs involved a variety of activities, including making decisions about how to implement curriculum in their schools. The paragraphs that follow detail variation in some aspects of curriculum across sites (namely, adoption processes and types of materials used) as well as commonalities across sites (namely, use of reportedly standards-based and, often, vertically aligned curriculum).

Across the case study schools, adoption or development of curriculum took many different forms. For example, some schools – namely Big Horn Middle School and Stagecoach Elementary School – were in districts that engaged in district-wide, multi-year curriculum adoption processes that used subject-based committees to select district-wide curriculum resources and develop district-wide assessments. Laramie High School, too, was in a district that used district-wide curriculum, though teachers selected some curricular materials at the school level. Natrona County High School teachers used materials that had been approved by the district, but these materials were not necessarily the same across district schools. Some schools (outlined in more detail in the next paragraph) used teacher-chosen materials.

The types of curricular materials that teachers used also varied across sites. For example, some schools used extant curriculum packages: examples included Stagecoach Elementary School's use of district-chosen ReadyGEN materials for ELA and Eureka for math as well as Colter Elementary School's use of the Bridges math curriculum package. Conversely, some schools indicated that they did not rely on curriculum packages for curricular materials. In these schools, including Sagebrush Elementary School, Big Horn Middle School, Wind River High School, and Clearmont K-12 (particularly for elementary math), teachers reported curating a set of curricular resources that included both extant and externally developed curriculum but also district- and school-level teacher-created curriculum.⁹

Regardless of how the schools or their districts adopted curriculum or the materials they chose, one extremely consistent theme across schools was the importance of standards in the curriculum adoption process. Educators in all ten schools discussed the need to tie curriculum to standards, and study participants in nearly all ten schools reported that the curriculum in their schools was heavily influenced by standards. Over and over, district officials, school leaders, and teachers described a curriculum adoption process that was driven by whether the chosen curriculum materials aligned with standards. A second consistent theme across schools was the use of vertically aligned curriculum. At least six case study schools (Big Horn Middle School, Clearmont K-12, Colter Elementary School [for math], Greybull High School, Laramie High School, Stagecoach Elementary School) explicitly used a curriculum that aligned across grades.

Provision of multiple types of intervention

As noted in the section on PLCs, teachers at the case study schools worked with each other to review student data and make decisions about how to provide extra support for students to meet standards. A consistent theme across the schools was the prioritization of extensive opportunities for extra support, both in the form of built-in time for all students to focus on areas of improvement as well as additional supports for those students who continued to struggle. In some cases, this provision of extra support aligned with schools' multi-tiered system of supports (MTSS) approach. These schools' intentional use of time for core/intervention periods allowed for (a) all students to receive instruction in the core subjects, (b) time for all students to receive additional instruction to ensure that they master skills, and (c) even greater levels of targeted support for those students who still struggled after core instruction and instruction in school-wide intervention times.¹⁰

With respect to school-wide time for additional instruction beyond the core, all ten schools prioritized intervention and set aside dedicated and protected time – in most cases, daily – for every student to receive additional support to master standards. All four schools that educated elementary-aged students used some variation of a daily “what I need” (“WIN”) period,¹¹ during which time teachers assigned students to fluid groups to receive instruction focused on specific math or ELA skills. Big Horn Middle School as well as four of the high schools in the study (Greybull High School, Lovell High School,

⁹ In addition to materials that teachers developed themselves (either individually or collaboratively), examples of teacher-chosen materials from extant or external sources included both print sources (e.g., novels, textbooks) and online materials (e.g., IXL, Zearn).

¹⁰ These approaches strongly mirror the approaches outlined in the special education report that is part of the overall recalibration study. Please refer to the section in the special education report entitled “Best Practices” for more information.

¹¹ Educators at one school (Stagecoach Elementary School) did not use the WIN terminology but described a daily intervention approach that was aligned with the other schools' descriptions of WIN time.

Natrona County High School, and Wind River High School) had daily intervention periods, and the other high school (Laramie High School) set aside time for weekly intervention periods.

As noted above in the section on school staffing, the schools employed a comprehensive approach to staffing these times for extra help. That is, both classroom/content teachers and intervention teachers provided targeted instruction during these periods. At times, these teachers received assistance from paraprofessionals to provide this targeted support. At the elementary level, this approach resulted in a situation in which students had access to extra help from multiple types of certified teachers and personnel (e.g., classroom teachers, intervention teachers or tutors, and – at times – librarians). At the secondary level, this approach resulted in students receiving targeted support from content teachers in the subjects in which they struggled to meet standards.

Several schools also offered additional, targeted support during the school day for students who needed extra support beyond these school-wide intervention periods. For example, some of the secondary schools, including Clearmont K-12, Lovell High School, and Wind River High School, offered ELA and/or math intervention courses that students took concurrently with their traditional courses to receive supplemental instruction.

Additionally, every school in the case study sample offered academic intervention outside of school time. Eight schools had afterschool programs or tutoring opportunities (some of which were grant-funded),¹² and the remaining two schools (Big Horn Middle School and Wind River High School) had tutoring opportunities on Fridays when school is not in session (as these schools had a four-day school week). Several of the schools also offered summer school (again, some of which was grant-funded). These schools included Colter Elementary School, Sagebrush Elementary School, Lovell High School, and Natrona County High School.

Strong leadership and professional cultures

Interviews and focus groups revealed consistent perceptions of high-quality building administrators and teaching staffs. For example, teachers in nearly all case study schools described their principals as strong leaders. Across sites, teachers described school leaders who cultivated “supportive” environments where teachers were empowered to make instructional decisions and offered opportunities for genuine professional growth. In fact, some participants perceived positive school culture to impact not only teachers but also students. In the words of a teacher in one case study school, positive change occurred under the current principal’s leadership and “the culture has shifted, and it has trickled down to the kids.” This sentiment also existed at other case study sites, as teachers in additional schools attributed recent school successes to the arrival of the current school administrations.

Comments regarding the quality of school personnel were prevalent regarding instructional staff. Comments from teachers at multiple schools painted a picture of case study educators as teachers who “work extremely hard together” and were “dedicated” educators who “put in the time.” Additionally, study participants from several case study schools described a collaborative working environment among teaching staffs that they perceived help teachers learn from each other. Further, case study participants used several terms to describe a shared professional culture among teachers at the schools. At one school, teachers noted the presence of a “growth mindset” for students; at another, staff

¹² One of these eight schools, Colter Elementary School, offered tutoring help afterschool onsite but did not offer an onsite afterschool program. However, Colter students had access to a district afterschool program.

members described a shared sense of “collective efficacy.” At a third school, teachers noted a “professionalism” among staff that fostered a “productive environment.” At still others, teachers described a school-wide sense of accountability for student performance, such that all teachers perceived they had the responsibility to help all students achieve to high levels.

Conclusion: Alignment with the Evidence-Based (EB) Model

As described in more detail below, findings from the case studies suggest that these schools’ practices aligned strongly with the EB Model, and many elements described in the EB Model’s theory of action were present at these schools.

Staffing

Investigation of the case study schools’ core and elective teacher staffing levels reveal several themes. First, in the case study elementary schools, core class sizes were higher than the Legislative Model and similar to the EB Model. Additionally, the two large high schools in the case study sample had ELA and math classes that were similar to or slightly higher than class sizes in the Legislative Model.

In all high schools as well as the middle school and the K-12 school, the ratio of elective to core teachers was higher than the EB Model recommends. Case study staff noted the importance of elective courses (including CTE courses at the secondary level), and some secondary case study schools ran seven- and eight-period days (described in more detail in the individual school reports). However, as noted in Chapter 3 of the 2020 Picus Odden recalibration report, in the section that details evidence surrounding elective teachers, the EB Model does not fund electives at that high a level due to an emphasis on increasing instructional time available for core subjects.

Despite recent reductions in funding allocations for instructional facilitators, most case study schools relied on instructional facilitators or similar personnel to provide support to teachers (though, in some cases, their access to instructional facilitators in 2019-20 was lower than it had been in previous years). The fact that most schools and/or districts continued to fund instructional facilitators speaks to the apparent import of these positions to teacher professional development and support in these schools. Staff in the schools and districts with instructional facilitators reported a wide range of support from instructional facilitators. Such findings – as well as the finding that a school that lost its access to instructional facilitators perceived that this loss negatively impacted teacher support – suggest that the state should reconsider its funding reductions for instructional facilitators.

Case study schools’ approach to staffing for tutors reflected a nuanced take on providing intervention to students. While most schools employed or planned to employ certified intervention teachers in the upcoming year, they did not solely rely on these teachers to provide extra support to students. Instead, they also relied on other certified teachers (i.e., grade-level classroom teachers in the elementary schools and content teachers in the secondary schools) to provide targeted instruction to students. They typically used a combination of classroom/content teachers, intervention teachers/tutors, and occasionally paraprofessionals which allowed the schools to provide robust extra help to students struggling to meet performance standards.

Regarding counselors and nurses, while particular staffing levels may vary slightly based on a variety of factors (i.e., school size and numbers of “at-risk” students), many of the schools’ staffing levels – particularly for counselors – were similar to the EB Model’s allocations of a counselor for each

prototypical elementary school and a counselor for every 250 students at the secondary level. Additionally, that each of the schools had access to counselors, and that all but one of the schools had access to nurses, aligns with the EB Model's updated 2020 recommendation for at least some staffing in these areas in each district. These findings strongly support findings from the professional judgment panels, where educators called for increased counselor and nursing resources to support students who were facing many social-emotional and health challenges.

Strategies

In several ways, the strategies employed by the case study schools aligned with the school-improvement practices that undergird the EB Model. For instance, case study sites' strong and consistent reliance on PLCs is an example of the EB Model's recognition that strong schools engage in collaborative professional growth, adopt professional cultures, analyze data to inform instructional decisions, and make instruction public. Additionally, the case study schools' extensive use of interventions to offer additional instructional support for students to increase achievement – and the schools' willingness to restructure their school days to allow for in-school time for such interventions – aligns with recommendations in the EB Model's school improvement strategy.¹³ Study participants' descriptions that their schools had strong building leadership, high-quality teaching staff members, and access to instructional facilitators also reflect key tenets of the EB Model's foundational practices. Case study site use of curriculum may align, in part, with the EB Model. Specifically, teacher reports that their curriculum had to tie to standards is in clear alignment with the EB Model recommendations, though reliance on teacher-chosen or teacher-created materials is not necessarily a key feature of the EB Model's curriculum recommendations.¹⁴

¹³ As noted above, this strategy also aligns with the "Best Practices" as identified in the special education study.

¹⁴ This study was not designed to evaluate the quality of curricular materials, be they part of external curriculum packages or teacher-created materials.

Big Horn Middle School A Case of an Improving School in Wyoming

Prepared for the Wyoming Legislature Select Committee on School Finance Recalibration

Kathleen Mulvaney Hoyer

Activate Research, Inc.

Partner to Picus Odden & Associates

December 1, 2020

Executive Summary

This case study describes Big Horn Middle School (BHMS) in Sheridan County School District #1. The middle school shares a building with the high school and sits on the same campus as the elementary school. In 2019-20, BHMS educated 108 students in grades 6 through 8. In that same school year, over 90 percent of the BHMS students were white. Twelve percent of students were eligible for free or reduced-price lunch, and 16 percent were classified as “at-risk” under the state funding model. In the past three school years, the percentage of BHMS students who were at proficient or above on the state summative achievement test has increased by 19 percentage points. This report describes the context in which these improvements occurred.

Findings Related to School Context

As described in more detail below, BHMS educators have placed a heavy emphasis on efforts to help students achieve proficiency on district assessments. Prominent among these efforts is a robust curriculum development process, wherein BHMS teachers and their district colleagues work to identify priority standards, align curriculum and assessments to those standards, and validate that the curriculum supported students’ achievement of those standards as intended. This process leads to district-wide, vertically aligned common curriculum and assessments. BHMS teachers implement this curriculum with hands-on instructional methods supported by sufficient technological resources, and they offer several types of additional support to struggling students. Indeed, study participants indicated that educators throughout the school embrace a “growth mindset” and provide multiple opportunities for students to develop and deepen their skills while they attain knowledge of priority standards.

Alignment with the Evidenced-Based Model

Investigations into how the school operates indicates several areas of alignment with the Evidence-Based (EB) Model as well as a few notable areas of divergence. In terms of similarities, BHMS staff engage in several activities supported by the EB Model: they embrace ambitious goals, support struggling students, review curriculum and instruction, implement collaborative professional development, and capitalize on external professional knowledge. Core and elective teacher staffing levels at BHMS, though, are lower than what would be generated in the EB Model.

Introduction

This report is one of ten case studies of Wyoming schools that have improved or demonstrated consistently high student performance in recent years. Taken together, these case studies inform the recalibration of the Wyoming Education Resource Block Grant Model. Specifically, the studies provide information relevant to costing out the basket of goods and services to which Wyoming students are constitutionally entitled. The studies offer insights on how the selected schools have leveraged their resources to foster large improvements in or high levels of student performance. The following sections of this report describe the school's context, student performance, staff, school schedule, approaches to teaching and learning, and professional development. The report draws upon information from two main sources: (1) a review of documents provided by school officials or available online and (2) individual and focus group interviews held virtually via Zoom with 12 members of the school and district staff that took place in April and May 2020.

School Context

Big Horn Middle School (BHMS) is located in Big Horn, Wyoming, a small, unincorporated community about 10 miles outside of Sheridan. The community has just under 500 residents, according to the last Census. While there is a small downtown with a few businesses, it is mostly a rural area with many ranches. Outdoor recreation is popular, and community residents can travel to Sheridan to participate in cultural activities. According to study participants, the area has many high-income families and is home to a luxury golf community, large ranches, and an equestrian center. Still, some residents of the area are struggling financially, particularly those who work as ranch hands or in the mining industry.

BHMS is part of Sheridan County School District #1 and is located on a K-12 campus alongside Big Horn's elementary and high schools. The elementary school is in its own building, while the middle and high schools share a building that was built in 2010. One study participant described the K-12 campus as "beautiful," and another described the atmosphere as fostering a "family" environment where older students and younger students learn together in the same setting. Study participants also noted that parents are involved in and supportive of the school and have high expectations for their children's academic performance.

While many participants described the community atmosphere fostered on the K-12 campus itself, one participant pointed out that fostering community among families can be difficult because not all families know each other. According to this participant, the school serves a relatively large proportion (i.e., potentially 40 to 50 percent of the school) of out-of-district students, some who commute significant distances to attend BHMS. This participant described a friendly relationship with a neighboring district, wherein district leadership work together to help families enroll in the schools that they think will best fit their needs. Some of the families from the other district prefer Big Horn due to its small size, and some families that live in Big Horn prefer the other district because it offers more classes. Accepting enrollment from neighboring areas involves a "delicate" balance, according to a study participant, and conversations regarding how many students to enroll can bring about an "interesting dilemma" with respect to balancing the additional funding associated with higher enrollments with a desire to keep class sizes low.

Student Demographics

According to school personnel, Big Horn Middle School educated 108 students in 2019-20 (Table 1).¹⁵

According to data from the Wyoming Department of Education, average English language arts (ELA) and math class sizes in 2019-20 were approximately 17.22 students.¹⁶

Table 1. Big Horn Middle School student enrollment: 2019-20

Grade level	Enrollment
6	35
7	39
8	34
Total	108

Source: Personal communication with school staff.

In 2019-20, the student population at BHMS was composed mainly of students who were white (Table 2). Twelve percent of students were eligible for free or reduced-price lunch, and 16 percent were classified as “at-risk” under the state funding model (that is, the unduplicated count of students eligible for free or reduced-price lunch, English language learner [ELL] students, or mobile students in grades 6-12).¹⁷

¹⁵ According to information from the Wyoming Department of Education (“Fall Enrollment Summary By School By Grade for School Year 2019-20”), BHMS enrolled 121 students in 2019-20. The difference in student counts is due to the presence of Cowboy State Virtual Academy, a virtual school for students in Sheridan County School District #1. While some Cowboy State students are formally assigned to BHMS as their school of record, BHMS is not responsible for providing curriculum or instruction to these students. Educators at a virtual education company (Acellus) are responsible for creating curricular content and delivering instruction, and local educators are responsible for face-to-face check-ins with Cowboy State students. These local educators – be they BHMS staff or not – receive a stipend for this work. The district pays tuition to Acellus for the students enrolled in Cowboy State Virtual Academy and also pays an additional fee so that teachers at BHMS and other brick-and-mortar schools in the district can access the Acellus content as supplemental materials for their classes.

¹⁶ Calculation provided to the study team by the Wyoming Department of Education, based on analysis of combined wde684 student, wde684 section, and wde638 course data sets.

¹⁷ Calculations to compute percentage of students designated as “at-risk” based on a count of 108 students.

Table 2. Big Horn Middle School student characteristics: 2019-20

Student characteristic	Percentage of student population
Race/ethnicity	
American Indian/Alaska Native	-
Asian	-
Black	-
Hispanic	-
Pacific Islander	-
Two or more races	-
White	92
Eligible for free or reduced-price lunch	12
English language learner	-

- Data not reported to protect student confidentiality.

Note: Detail may not sum to total due to rounding.

Source: Wyoming Department of Education, "School Level Fall Enrollment by Ethnicity and Gender" and "USDA National Food Lunch Program and Local Free and Reduced Lunch Eligibility - School Level For 2019-20."

According to one study participant, school attendance is typically strong, and mobility is relatively low. Total school enrollment has fluctuated a bit across time, driven in part by the numbers of students the school accepts from out-of-district as well as variations in the sizes of classes coming up from Big Horn Elementary School.

School Goals

Approximately three years ago, school staff shifted their school goals. Instead of focusing school goals on student outcomes on the Wyoming Test of Proficiency and Progress (WY-TOPP), teachers and school leaders decided to focus on student performance with respect to district assessments. The school has an overarching goal that 80 percent of students will test proficient the first time on district-created unit assessments, which one participant described as a "lofty goal." School personnel indicated that they perceive that monitoring the percentage of students who are proficient on district assessments will inform educators on the extent to which Tier 1 instruction is reaching students and helping them learn state education standards. Further, they believe that if students perform well on these district assessments, then they will also perform well on the WY-TOPP.

School Culture

Teachers in the school described the culture positively; from their perspective, the school is a "special place" with a "great staff." One described a feeling of having "landed in a gold mine," and another described feeling "blessed" to work there. Study participants perceived that the teachers at the school are committed, "dedicated" educators who are "all in" with respect to collaborating with each other to support student learning. Despite the many positive comments about school culture and teacher working conditions, the teachers also reported that their jobs include a lot of effort – particularly for those teachers who teach courses at both the middle and high schools – and one teacher explained that it can feel like "sprinting a marathon."

Study participants described embracing a “growth mindset,” wherein they expect all students to advance, regardless of whether they had struggled or excelled in the past. Teachers shared that they have very high expectations for student achievement and that staff hold students accountable. This accountability comes with support: if students are not proficient after Tier 1 instruction, they receive remediation and extra instructional assistance.

Student Performance

BHMS students’ performance on state assessments has improved over the past few years (Table 3). Specifically, the percentage of students who scored at or above proficient on the state summative assessment increased 19 percentage points between the 2016-17 and 2018-19 school years.

Table 3. Percent of Big Horn Middle School students who scored at or above the proficient level on the state summative assessment: School years 2016-17 through 2018-19

Year	Percent of students at proficient or above
2016-17	60
2017-18	71
2018-19	79

Note: Wyoming has changed its summative assessment in recent years and began giving the current test (the Wyoming Test of Proficiency and Progress, or WY-TOPP) in 2017-18. Accordingly, the data for these calculations come from different assessments over time (e.g., the formerly used Proficiency Assessments for Wyoming Students [PAWS] and the WY-TOPP). While changes in test administration make cross-year comparisons more difficult, using data from multiple assessments allows for review of scores over a longer time period.

Source: Data provided to study team by the Wyoming Department of Education.

School Staff

According to the Wyoming Department of Education, the average school salary for a middle school teacher in Sheridan County School District #1 in 2019-20 was \$61,875, which was slightly lower than the statewide average salary for a middle school teacher (\$63,370).¹⁸

¹⁸ Data for Sheridan County School District #1 retrieved from the “All Staff by Category and District with Average Salaries” database found at <https://edu.wyoming.gov/data/statisticalreportseries-2/>. Data for Wyoming retrieved from “State Staff by Category with Average Salaries” at the same site.

Table 4. Staffing at Big Horn Middle School, 2019-20

Category	FTE
<i>Licensed staff</i>	
Core teachers	4.00
Elective teachers	1.48
Career and technical teachers	0.83
Special education teachers	1.00
Librarian	0.50
<i>Non-licensed staff</i>	
<i>Aides</i>	
Instructional aides (paraprofessional)	0.50
Special education paraprofessionals	1.00
<i>Administration</i>	
Principal	0.90
Athletic director	0.10
Clerical	1.00
<i>Pupil Support</i>	
Counselor	0.50
Nurse	about 0.33
Speech language pathologist	as needed
School resource officer	0.40

Source: Conversations with school staff.

BHMS has four core teachers: one each for the subjects of ELA, mathematics, science, and social studies (Table 4). Three of these four teachers instruct a reading course in addition to their traditional courses in their content areas (see more detail on the reading program in the section on curriculum). The school has nearly one and a half FTE positions for electives, which include teachers for physical education/health, music, art, and outdoor education. BHMS offers industrial arts and business technology courses, taught by educators who also teach courses at the high school; combined, these teachers are working with middle school students at a level of just over 80 percent of an FTE. The school has one special education/resource teacher. One librarian serves the middle and high schools and, thus, works about half-time for the middle school. This educator also covers the workspace/study hall course. The school currently has no English as a second language (ESL) teachers, gifted/talented teachers, or intervention teachers, though school staff indicated that the school would have one intervention teacher for the next school year. The school does not have any school-based instructional facilitators, though BHMS teachers had access to one district-level instructional facilitator in the 2019-20 school year.¹⁹

¹⁹ In prior years, the district had two instructional facilitators, but that staffing level had been reduced by 2019-20 to one instructional facilitator for the whole district.

BHMS has a half-time paraprofessional who works in the workspace room, and one paraprofessional who works with special education students. Because the special education paraprofessional is also a certified ELA teacher, she works with students on reading interventions.

The principal spends most of his time in the principal role but also works part time as the school's athletic director. One secretary supports the work of the school. The school also has 3.3 FTE for custodial work and one kitchen staffer (not shown in table).

In terms of pupil support, the school has access to a nurse who also serves the high school (which is located in the same building) and the elementary school (which is located on the same campus). Currently, the school has about 0.5 FTE of a guidance counselor, though it will have closer to 1 FTE for that role next year. The school has access to a speech pathologist as needed, who is supported through BOCES (Board of Cooperative Educational Services) funds. Finally, the school has access to about 0.4 FTE of a school resource officer, whose salary is provided by the district during the school year and the law enforcement agency during the summer months.

School Schedule

BHMS operates on a four-day instructional week. The teacher day runs from 7:30 am to 4:30 pm, and the student day runs from 8:00 am to 3:55 pm, Monday through Thursday. School personnel reported that they work to provide uninterrupted instructional time during these days. For instance, study participants noted that while the school will allow extracurricular activities to practice on Monday through Wednesday, they are careful not to schedule contests or games on those days to protect school time.

Approaches to Curriculum, Instruction, Intervention, and Assessment

Curricular Program

Curriculum development

Sheridan County School District #1 recently invested in a multi-step, district-wide curriculum development process. According to a study participant, the district contracted with Curriculum Leadership Institute (CLI) several years ago to begin this process. The district developed a long-range plan to guide its work, which includes rotations of curriculum development, curriculum validation, and resource adoption elements.

The curriculum development process is driven by subject area committees (SACs), which are district-wide bodies that contain 16-18 people, depending on the subject area. SACs include all of the middle and high school teachers of the focal subject as well as a representative from each of the elementary grades. The ELA SAC also includes a special education representative, given that many of the IEPs that students in the district hold are reading-focused. Each of the district principals chairs a SAC, and a teacher co-chairs each SAC. The SACs meet one time per month for a full-day meeting.

Curriculum development occurs over a multiple-year period. In the first year, the relevant SAC will develop the curriculum. The second year involves curriculum validation and assessment development. In the third year, educators validate the assessments. Creation of the pacing guides, assessment guidelines,

and proficiency scales is ongoing.²⁰ Since the district shifted to this curriculum development approach, Sheridan County School District #1 educators and administrators have created curriculum for multiple subject areas, including both ELA and math.

Course offerings and curricular resources

In addition to core classes, BHMS offers courses in electives such as technology, industrial arts, art, band, choir, and outdoor education. BHMS students also have physical education and a workspace class every day as well as instruction in character education and study skills. Alongside the traditional ELA course, the school implements a reading program for all students which includes a daily, ungraded class that students take in addition to their other English course. Teachers from multiple subject areas teach the reading course, and they collectively build discussion questions for the groups that will help students prepare for the WY-TOPP.

Curricular materials for the courses offered at BHMS come from a variety of sources. While the district has purchased some packaged texts or curricular programs (e.g., Read 180), many courses use a mixture of materials that the teachers collaboratively curated during the district development process. For example, the ELA curricular resources include materials from Newsela, books, and older literature textbooks (e.g., *Elements of Literature*). In sixth grade, teachers also use some parts of a Holt/Houghton-Mifflin text. For the reading program, school personnel choose one novel that all students in the school will read; they endeavor to choose interesting books that cover different topics and help students see diverse perspectives. The math curriculum includes materials from Big Ideas Math and MidSchoolMath. The science curriculum does not rely on the use of a specific textbook. Rather, the science curriculum that the district developed relies on a variety of materials that align with standards. These materials include Pearson materials and CK12.org, which has online resources and texts. In social studies, curricular materials include Newsela, iCivics, videos from YouTube, IXL, and Junior Scholastic. Similarly, courses in electives (such as music and art) as well as career and technical education (such as industrial arts and business/technology) use a variety of curricular materials and learning experiences that align to standards and offer students deep engagement with these subject areas. Teachers chose materials for these courses through the district curriculum development process described above.

School personnel use some specific curricular materials for remediation and for special education. For example, the school has the Read 180 program and also uses IXL for ELA remediation. The special education/resource teacher uses materials from Vocabulary through Morphemes as well as Wilson Reading, a structured Tier 3 reading curriculum designed for struggling readers.

In sum, curricular resources at BHMS – developed during the district’s multistep curriculum development and adoption process – are common across the district and are vertically articulated.

²⁰ The process depicted here generally describes the initial curriculum development process. In subsequent years (typically one year after the state releases updated standards in a content area), the district will review the curriculum in that content area. Usually, they make few changes to the curriculum in these review processes and the processes are relatively short; a study participant attributes the limited nature of these reviews to a perception that the state standards typically do not change too drastically. These review and modification periods can take one to two years.

Instructional Program

A common theme that permeated discussions of instruction with school personnel was exploratory or hands-on instruction. For example, teachers reported that science courses use strategies such as in-school laboratory assignments or out-of-school field trips to test water or learn about plants and insects. In math, teachers let students explore the material and develop problem-solving skills. Teachers described heavy reliance on student discussion in ELA and social studies. Industrial technology and business technology courses involve a great deal of project-based learning. The school has extensive electronic resources – they are 1:1 with Chromebooks at BHMS.

Interventions for Struggling Students

As noted in the section on school goals, BHMS focuses heavy attention on students achieving proficiency on district assessments. Students who do not achieve proficiency the first time they take an assessment must receive additional support, correct their work, and re-take the assessment. This attitude of correction and resubmission permeates school culture. To support the goals of continuous academic growth, BHMS offers multiple opportunities for students to master course content. For example, all students have one period per day for a workspace period (similar to what some schools call an intervention and enrichment period), during which time they receive support in areas in which they are struggling and can communicate with teachers about their progress toward proficiency. Further, the school's reading program (described in the previous section) uses intentional student grouping strategies such that students with similar needs are placed together in groups so teachers are able to target instruction to those particular needs.

Alongside these daily opportunities for support is a weekly offering: Friday school. The primary purpose of Friday school is to provide extra instruction for students who are struggling to meet standards in ELA and math. Teachers also provide additional support for science and social studies as needed.

Approximately one day per month, the school operates on a modified schedule that allows for the addition of a "what I need," or "WIN," period to the day. During this 40-45 minute period, students receive extra support from teachers. Additionally, about once per quarter, the school hires substitute teachers so that the core teachers can pull student groups and focus on topics that students need to master.

Assessments

BHMS personnel use several different types of assessments. Interviews and focus groups with school and district personnel particularly highlighted the types of short-cycle/interim and formative assessments upon which they rely. Specifically, the school uses WY-TOPP modular assessment data to determine student placement for the reading class described above. The school also administers district common assessments for all content areas. The number of assessments per area varies based on the number of outcomes/standards the content areas have. Study participants estimated that core courses have approximately 6 to 9 assessments per grade level. Teachers look at data from these assessments on a regular basis to make decisions regarding instruction and intervention; for instance, they use the data from these assessments to inform student grouping strategies. With respect to formative assessment, teachers reported that they use a variety of approaches, including exit tickets, formative quizzes, and monitoring student progress while they work in the classroom. Teachers at the school, which uses standards-referenced grading (levels 1-4, where 3 is proficient), focus on giving students a

great deal of feedback and allowing for revisions to strengthen work. Additionally, the special education/resource teacher uses Aims Web and Aims Web Plus for progress monitoring.

Professional Development

Much of the professional development at Big Horn Middle School – and at Sheridan County School District #1 in general – is collaborative. For example, at the district level, one Friday each month is reserved for collaborative professional work that they call cohort days, which includes a block of time in the morning for teachers to work with their counterpart at the other middle school in the district on things like lesson planning and assessment development. For the rest of the day, teachers are able to receive other training as needed, usually based on the principals' choice of content.

At the school level, the principal runs book studies so that the teachers at the school can reflect on the work of education experts (e.g., Jan Hoegh, John Hattie) or learn more about important topics (e.g., positive school culture). Additionally, BHMS teachers are organized into professional learning communities (PLCs). Even though the teachers in the school are singletons (i.e., the only teacher of their subject area), the school has two PLCs: one comprised of core teachers and the other comprised of elective teachers. Members of the PLCs have common planning time and formally meet at least once per week, though sometimes they meet more frequently than that.

Study participants noted that, in addition to these collaborative forms of professional development at both the district and the school level, the district sends teachers to national and state conferences for their content areas.

Summary and Alignment with the Evidence-Based Model

BHMS has shown impressive improvement on the state summative assessment in recent years. In fact, the percentage of BHMS students at or above proficiency on the summative assessment jumped 19 points between 2016-17 and 2018-19.²¹ Several factors have likely influenced this increase, and this study is not designed to identify the specific strategies related to specific increases. What this study does is illuminate the context in which these improvements occurred: a context marked by what study participants described as a “dedicated” and “great staff” who hold a “growth mindset,” a common articulated curriculum across grade levels with common assessments, and a heavy emphasis on providing multiple supports for students to attain proficiency.

Investigations into how the school operates indicate areas of alignment and divergence with the Evidence-Based (EB) Model. For example, many of the strategies BHMS staff use align with the EB Model. These strategies include the following activities:

- Embracing ambitious goals
- Providing several opportunities for assistance to struggling students
- Investing significant time across several years to review curriculum and instruction
- Cultivating professional growth through collaborative professional development
- Capitalizing on external professional knowledge.

²¹ Please note that the state summative test changed during this time period. See the note on Table 3 for additional information.

Teacher staffing levels at BHMS, though, are lower than what would be generated in both the EB and the state's Legislative Models. Specifically, the EB Model would generate 7 positions for the school and the Legislative Model would generate 8 positions. However, BHMS only employs 6.31 FTEs for these teachers (4.00 for core teachers and 2.31 for elective teachers, including CTE teachers).

Clearmont K-12

A Case of an Improving School in Wyoming

Prepared for the Wyoming Legislature Select Committee on School Finance Recalibration

Kathleen Mulvaney Hoyer

Activate Research, Inc.

Partner to Picus Odden & Associates

December 1, 2020

Executive Summary

Clearmont K-12 is one of two schools in Sheridan County School District #3, and it is the only school in the district that serves students in grades 5 through 12. The school is located in a very rural setting. Students come from a large geographical area that includes the communities of Clearmont, Banner, Buffalo, Arvada, Spotted Horse, Recluse, and Gillette. In 2019-20, the school enrolled 83 students. In that same year, 95 percent of the students in the school were white and 29 percent of the students were eligible for free or reduced-price lunch. Thirty-six percent of the students were designated as “at-risk” based on the state’s funding model. In recent years, Clearmont K-12 students’ performance on the state summative assessment has improved. Specifically, the percentage of students in grades 3 through 8 who were at or above proficiency rose 15 percentage points between 2016-17 and 2018-19. For high schoolers, the percentage rose 27 points between school years 2017-18 and 2018-19. The purpose of this report is to document the context at the school during these periods of growth and to identify how, if at all, the school’s strategies and staffing align with the Evidence-Based (EB) Model.

Findings Related to School Context

Teachers at the school described a context of a cohesive school culture that fosters collaboration and community both among teachers and between teachers and students. Study participants also described a context marked by a consistent approach to curriculum and instruction where teachers use a coordinated balanced literacy approach across kindergarten through grade 6. Teachers at both the elementary and secondary levels receive support from instructional coaches. For students in both the elementary and secondary grades, the school sets aside time within the school day for extra help for students who are struggling to meet standards.

Alignment with the Evidence-Based Model

Clearmont K-12’s approach aligns with the EB Model in many ways. Specifically, staff implement many of the strategies that undergird the EB Model, including setting high goals for students; adopting an aligned, schoolwide curriculum that teachers felt would help them attain new goals; implementing professional learning communities (PLCs) supported by instructional coaches; and providing many opportunities for additional instruction for struggling students. However, some staffing levels at the school do not match the EB Model. Specifically, the number of core, elective, and career and technical education teachers at the school is lower than what would be generated by the EB Model.

Introduction

This report is one of ten case studies of Wyoming schools that have improved or demonstrated consistently high student performance in recent years. Taken together, these case studies inform the recalibration of the Wyoming Education Resource Block Grant Model. Specifically, the studies provide information relevant to costing out the basket of goods and services to which Wyoming students are constitutionally entitled. The studies offer insights on how the selected schools have leveraged their resources to foster large improvements in or high levels of student performance. The following sections of this report describe the school's context, student performance, staff, school schedule, approaches to teaching and learning, and professional development. The report draws upon information from two main sources: (1) a review of documents provided by school officials or available online and (2) individual and focus group interviews held virtually via Zoom with 23 members of school and district staff that occurred in April 2020.

School Context

Clearmont, Wyoming, is a quiet community. It has a few businesses, a fire department, and emergency medical technicians but no police department. Clearmont used to have a more active commercial center when ranching and other industries (e.g., railroad, minerals, methane) were prominent in the area. This changed about 20 years ago with the introduction of an interstate that connected Wyoming towns and made it unnecessary to travel through Clearmont. Industry declined as the railroad office closed and larger corporations bought smaller ranches. Now, while there are some jobs (e.g., ranching, work in the minerals industry, jobs at the post office or school), most people are retired or go to Sheridan or Gillette for work.

Clearmont K-12 is in Clearmont and is one of two schools in Sheridan County School District #3 – the smallest district in the state in 2019-20 in terms of student enrollment. The other school serves elementary students (kindergarten through grade 4) in Arvada, about 20 miles to the east.²² Until 2016, Clearmont K-12 was three separate schools, but during a past recalibration effort, the district consolidated the three schools into one school. The main building houses the K-12 school and the district offices. The district cooking staff use the Clearmont building and a food service staff member brings meals from the Clearmont building to Arvada.²³ A separate building in Clearmont services the transportation office.

The district is geographically very large, and the school is in an extremely rural area. According to a study participant, the community of Clearmont has about 150 people, and many of the residents are older adults. Thus, while some of the students at Clearmont K-12 live in Clearmont, many come from outside of the community. According to study participants, students at the school generally come from Clearmont, Banner, Buffalo, Arvada, Spotted Horse, Recluse, and Gillette. A substantial portion of students at the school (even as high as 40 percent in some years) are from out of district, but they choose to go to Clearmont K-12 because they are closer to Clearmont than to their in-boundary schools. Parents of children at the school hold jobs in a wide variety of fields, from ranching to healthcare to education. Accordingly, the socioeconomic status (SES) of the students in the school varies somewhat,

²² According to a study participant, the district plans to operate the Arvada school for only one more year. After 2021, all students in Sheridan County School District #3 will attend school in Clearmont.

²³ Sheridan County School District #3 no longer participates in the National School Lunch Program. Instead, the district bears the cost of the food service program and has designed a food service model that they perceive better fits their needs.

though the study participants reported that they perceive the percentage of students who qualify for free or reduced-price lunch to be higher at Clearmont K-12 than it is in neighboring districts.

Student Demographics

In 2019-20, the school enrolled 83 students (Table 1). According to information from the Wyoming Department of Education, the average English language arts (ELA) and math class size in 2019-20 was 7.02 students.²⁴

Table 1. Clearmont K-12 student enrollment: 2019-20

Grade level	Enrollment and average core class size
Kindergarten	4
1	5
2	3
3	4
4	4
5	4
6	9
7	7
8	14
9	4
10	7
11	8
12	10
Total	83

Source: Wyoming Department of Education, "Fall Enrollment Summary By School By Grade for School Year 2019-20."

²⁴ Calculation provided to the study team by the Wyoming Department of Education, based on analysis of combined wde684 student, wde684 section, and wde638 course data sets.

In 2019-20, most of the students (95 percent) at Clearmont K-12 were white (Table 2). Just under one-third (29 percent) of the school's students were eligible for free or reduced-price school lunch. Thirty-six percent of the students were classified as "at-risk" under the state funding model (that is, the unduplicated count of students eligible for free or reduced-price lunch, ELL students, or mobile students in grades 6-12).

Table 2. Clearmont K-12 student characteristics: 2019-20

Student characteristic	Percentage of student population
Race/ethnicity	
American Indian/Alaska Native	-
Asian	-
Black	-
Hispanic	-
Pacific Islander	0
Two or more races	-
White	95
Eligible for free or reduced-price lunch	29
English language learner	-

- Data not reported to protect student confidentiality.

Source: Wyoming Department of Education, "School Level Fall Enrollment by Ethnicity and Gender," "USDA National Food Lunch Program and Local Free and Reduced Lunch Eligibility - School Level For 2019-20," and data provided to the study team by the Wyoming Legislative Service Office.

School Goals

When asked about school goals, one study participant quoted the mission of Sheridan County School District #3: "Empowering students to succeed as lifelong learners through diverse and individual educational opportunities." This participant perceived that the district mission is an accurate reflection of the work of educators throughout the school. In terms of student academic performance, study participants shared the district's goal that 80 percent of students will score at proficient or above on the Wyoming Test of Proficiency and Progress (WY-TOPP). Additionally, in the elementary grades, teachers noted a goal for academic growth for every student, which recognizes that all students can advance to a higher skill level. At the secondary level, teachers work hard to tailor instruction to students' strengths and individualize academic work to student interest.

School Culture

According to study participants, the school is a "really good place" that is like a "family, from every aspect." The students and teachers "have grown up together," and, because the school is so small, everyone knows everyone else. Parents, too, are involved in the school. Because the communities surrounding the school are small as well, the families all know each other – thus, teachers know their future students even before the children reach school age. The participants noted that the school is a

“good environment” and that “everybody is here to make sure the kids are successful.” They described the school as a small school where students do not “fall through the cracks.”

Study participants described a teacher working environment that is collaborative and supportive. Teachers reported that both the elementary (K-6) teacher team and the secondary (7-12) teacher team work well together and collaborate frequently. Teachers indicated that they receive support from their peers as well as their administration. They work together regularly (sometimes even daily, informally) on matters of curriculum and instruction, and study participants noted that the school has cultivated an environment where it is safe to ask questions, seek support or advice from colleagues, and voice concerns. Put differently, the school has taken advantage of its small size and created a cohesive school culture around high expectations for students and a coordinated curriculum program.

Student Performance

In recent years, Clearmont K-12 students’ performance on the state summative assessment has improved. Specifically, the percentage of students in grades 3 through 8 who were at or above proficiency rose 15 percentage points between 2016-17 and 2018-19. For high schoolers, the percentage rose 27 percentage points between school years 2017-18 and 2018-19 (Table 3).

Table 3. Percent of Clearmont K-12 students who scored at or above the proficient level on the state summative assessment: School years 2016-17 through 2018-19

Year	Percent of students at proficient or above
<i>Grades 3-8</i>	
2016-17	43
2017-18	55
2018-19	58
<i>High school</i>	
2016-17	(not available)
2017-18	51
2018-19	78

Note: Wyoming has changed its summative assessment in recent years and began giving the current test (the Wyoming Test of Proficiency and Progress, or WY-TOPP) in 2017-18. Accordingly, the data for these calculations come from different assessments over time (e.g., the formerly used Proficiency Assessments for Wyoming Students [PAWS] and the WY-TOPP). While changes in test administration make cross-year comparisons more difficult, using data from multiple assessments allows for review of scores over a longer time period.

Source: Data provided to study team by Wyoming Department of Education.

School Staff

According to the Wyoming Department of Education, the average salary for an elementary school teacher in Sheridan County School District #3 in 2019-20 was \$48,779, lower than the statewide average salary for an elementary school teacher (\$60,194). The average salary for a high school teacher in the district in 2019-20 was \$52,315, also lower than the statewide average (\$64,893).²⁵

Table 4. Clearmont K-12 school staff, 2019-20

Category	FTE
<i>Licensed staff</i>	
Core teachers	8.0
Elective teachers	2.4
Career and technical teachers	1.5
Instructional facilitators ^a	1.2
Special education personnel ^a	1.0
<i>Non-licensed staff</i>	
<i>Aides</i>	
Instructional paraprofessionals	2.1
Special education paraprofessionals	1.5
Library paraprofessionals	0.4
<i>Administration</i>	
Principal	0.4
Assistant principal (dean of students)	0.3
Athletic director	0.2
Clerical	1.0
<i>Pupil support</i>	
Counselor	1.0
Healthcare worker	0.5

^a Given that the district includes only Clearmont K-12 and one other elementary school, these positions may be considered district positions rather than school positions.

SOURCE: Conversations with school staff.

As shown in Table 4, Clearmont K-12 has eight core teachers: four for the elementary grades and four for the secondary grades. In the elementary grades, the school has one teacher for the kindergarteners, one teacher for the first and second graders, one teacher for the third and fourth graders, and one teacher for the fifth and sixth graders. According to study participants, the sixth-grade math standards vary from the fifth-grade standards, so the kindergarten teacher (rather than the fifth/sixth-grade teacher) teaches math to the fourth and fifth graders. In the secondary grades (grades 7 through 12),

²⁵ Data for Sheridan County School District #3 retrieved from the “All Staff by Category and District with Average Salaries” database found at <https://edu.wyoming.gov/data/statisticalreportseries-2/>. Data for Wyoming retrieved from “State Staff by Category with Average Salaries” at the same site.

one teacher teaches ELA, another teaches math, another teaches science, and a fourth teaches social studies.²⁶ These teachers receive support from paraprofessionals. One paraprofessional works at about 0.6 FTE to support kindergarteners through second graders, one paraprofessional provides support in math to the secondary school students, and one paraprofessional works about half-time to support students who are enrolled in online world language courses. One paraprofessional works at a 0.4 FTE level as a library aide.

The school also has about 2.4 FTE positions for electives: one music teacher, one art teacher, and one physical education teacher all work at the Clearmont campus at approximately a 0.8 FTE level, as they each travel to the Arvada school two mornings per week. The school has about 1.5 positions in career and technical education (CTE), including one teacher for vocational agriculture and about 0.5 of a position for business.

The district has just over one FTE for an instructional facilitator position. A literacy coach offers about 0.9 of an FTE to coaching the elementary teachers, and a math coach offers about 0.3 of an FTE coaching the secondary teachers. One special educator serves as the special education coordinator for the district. This educator receives support from paraprofessionals (1.5 FTE total) who also support students with special needs. The school has no English as a second language (ESL) teacher, no teacher for gifted/talented education, no intervention teachers, and no certified librarian.²⁷

A variety of personnel serve in administrative, pupil support, and other capacities. The district superintendent doubles as the school's principal, and one of the teachers supplements a teaching role with additional roles as the dean of students and the athletic director. Two staff members each offer 0.5 of an FTE as clerical support at the school level, and one of these staff members also offers 0.5 FTE in service to a first aid station. The school has a guidance counselor, three custodians, and two food service workers.

Because of the school and district's small size, many of the staff members in Sheridan County School District #3 and Clearmont K-12 possess unique skill sets and perform multiple roles. For example, teachers must have the skill set to educate multi-age students, as elementary educators teach multiple grade levels in the same classroom, secondary educators teach both middle- and high-school-aged students, and electives teachers teach kindergarteners through twelfth graders. Additionally, district and school personnel often have split appointments with multiple responsibilities (e.g., the superintendent also serves as the principal, the social studies teacher also serves as district technology support, another teacher also serves as the dean of students and athletic director, a paraprofessional works with students with special needs and oversees the online world language program, another paraprofessional provides instructional support to elementary students and also works in the library).

School Schedule

The school is on a four-day instructional week and follows requirements for 1,100 student contact hours annually. The teacher workday extends from 7:30 am to 4:30 pm, and the student instructional day goes

²⁶ The social studies teacher has an extra responsibility to serve as the technology coordinator, but this responsibility takes up a relatively small portion of the educator's time within the school year (perhaps about 1/8 of her time).

²⁷ While the school did not employ intervention teachers in 2019-20, it plans to have a full-time intervention teacher starting in the 2020-21 school year. This position will be funded by Title I dollars.

from 8:00 am to 4:00 pm. Secondary (i.e., grade 7-12) students have a 30-minute study hall at the end of the day, which allows for interruptions in the school day (e.g., assemblies, kids having to leave early for sports) without cutting into instructional time.

Approaches to Curriculum, Instruction, Intervention, and Assessment

Study participants described a change in recent years with respect to curriculum, instruction, and assessment. Specifically, beginning in about 2013 and with increased emphasis in about 2016, they refocused their efforts to realign curriculum to the WY-TOPP blueprints and standards, ensure consistency in curriculum and instruction, and develop assessments that align with this new focus. Study participants perceived that these shifts have been extremely impactful and, according to some, foundational to the school's success.

Curricular Program

Elementary grades

In about 2013, the school adopted the Fountas and Pinnell balanced literacy approach for elementary ELA. Teachers at the school have access to Leveled Literacy Intervention (LLI) materials, the Fountas and Pinnell curriculum literacy continuum book, a leveled library in a common area, and smaller library collections in each teacher's classroom. In addition to a focused use of the Fountas and Pinnell approach to balanced literacy and leveled books – which all elementary teachers reported using – teachers supplement with other materials from places like Teachers Pay Teachers, Common Lit, No Red Ink, Storyworks, and Time for Kids magazines. School personnel have worked hard to schedule intentionally at the K-6 level so that these teachers have a two-hour literacy block each morning.

Prior to about 2015, the school used Everyday Math in the elementary grades, but they decided to change focus. Instead, now, they have no designated curriculum but rather select materials based on the priority standards and proficiency scales that they created collaboratively. Teachers reported using math materials from sources such as Zearn, Task Card Centers, Khan Academy, Delta Math, and IXL.

Secondary grades

The secondary ELA curriculum is based on two novels per year, and the teacher selects one classic and one modern novel per course. The curriculum also includes content in drama, poetry, and non-fiction.

The secondary math curriculum uses a two-track system based on student skill, where one track is geared toward college and the other is geared toward entrance to the workforce. Precalculus is the highest math course the school offers. The math courses rely on content from Pearson textbooks. The teacher sequences the work intentionally to align to standards, which means that courses do not necessarily cover the material in the book in the order in which it appears. The teacher and paraprofessional supplement the Pearson textbook with older materials, materials from the Internet, and review sheets that the paraprofessional creates to assist students in tracking the math content they have learned previously.

The secondary science curriculum is based on the Next Generation Science Standards. Science curriculum comes from a variety of places, and the teacher pulls from past curricular materials as well as the Internet. One example of supplementary material is information from the STEMscopes program.

The secondary social studies curriculum includes courses in Wyoming and U.S. history, geography, and government. The social studies teacher also offers a concurrent enrollment course with Sheridan College, which covers either Wyoming history, history of Native Americans, Western civilization I, or Western civilization II. For these courses, the teacher has created a curriculum that emphasizes stories and relies heavily on primary sources.

The school also offers secondary students several elective and career and technical education courses. These courses cover art, music, physical education, business, computer science/coding, and agriculture. Teachers of these courses reported a variety of sources for their curriculum, including online sources and collaboration with peers at their school, across the state, and across the region. In each area, teachers tie curriculum to the standards. The school also offers students world language through online courses, many of which are provided by the Wyoming Virtual Academy (though one course is from a program called Keystone).

Instructional Program

As noted previously, the elementary ELA program relies on balanced literacy strategies, which include guided reading, shared reading, and independent reading. The teachers use a “walk to read” approach, as well, where students can go to other classrooms to get instruction that match their skill levels. Teachers at the secondary level use a wide variety of instructional approaches, including teacher modeling, lecture, independent student work, collaborative student work, student exploratory work (independently or with their peers), student discussion, and labs or other hands-on problem-solving work.

Interventions for Struggling Students

Academic Interventions

Elementary grades

Elementary teachers use “what I need” (or “WIN”) groups to provide intervention in ELA and math. Teachers set aside 15-30 minutes daily for WIN groups, during which time they and other support staff (e.g., paraprofessionals) offer targeted instruction to groups of students based on the specific skills that the students have not yet mastered.

Secondary grades

In the secondary grades, the school offers an ELA intervention course and a math intervention course. These courses enroll students from across grades 7 through 12 who are struggling to achieve proficiency on the standards. Teachers assign students to these courses based on review of student data (e.g., data from the Northwest Evaluation Association (NWEA) Measures of Academic Progress (MAP) test). These courses meet four times a week for 50 minutes each time. The ELA teacher uses two of these periods to differentiate instruction, wherein she offers a mini-lesson to supplement what the students are learning in the core course. The other two periods are like a structured study hall. Curriculum for the ELA intervention course comes from a variety of sources, including teacher-chosen materials, IXL, Newsela, and Common Lit. For the math intervention course, the teacher splits each class section between remediation (approximately 20 minutes) and help with homework (approximately 30 minutes). Curriculum for the math methods course comes, in part, from IXL.

These intervention courses exist alongside other efforts to help students who have fallen behind or who struggle with Tier 1 instruction. For example, the school offers a study skills course. Additionally, the

guidance counselor works on a case-by-case basis to help students get credit recovery options or to get one-on-one help. The school has a 30-minute study hall at the end of the day for all students in grades 7 through 12, and it uses grant money to offer an extended day program on Mondays, Tuesdays, and Wednesdays.

Behavioral Interventions

School staff offer a variety of supports to help students' behavior, as well. The school counselor sometimes works individually with students, and she also runs small groups to help students develop social-emotional competencies and work on conflict resolution. Additionally, the counselor offers a six-week group that focuses on female health issues for fifth and sixth grade female students. Male teachers run similar groups for male students.

The dean of students supports teachers and students around issues of student behavior, as his role is to handle any disciplinary issues that the principal does not need to address. Staff at the school rely on the dean of students to serve as a mediator who advocates for both teachers and students. According to a study participant, school staff endeavor to reduce the amount of time that students are out of the classroom for disciplinary issues.

Assessments

For the elementary students, the school uses Fountas and Pinnell benchmarks for ELA and uses MAP benchmarks for both ELA and mathematics. Teachers create a literacy binder for each student that includes running record data. For secondary students, the school uses the WY-TOPP modular assessments. Secondary students also take the ACT, and the school uses the Accuplacer for some course placement decisions. Across grades, teachers create chapter tests and formative assessments that are tied to standards, and they use quizzes to check student understanding frequently.

Professional Development

In recent years, the school has focused on the use of professional learning communities (PLCs) as a consistent source of professional development and a vehicle for teachers to collaborate with each other around curriculum and instruction. The elementary team has weekly PLC meetings each Wednesday after school for an hour. The focus of these meetings is to review student data, lesson plan, create common assessments, address vertical expectations, develop strategies to assist struggling students, and celebrate successes. The guidance counselor and special education teacher come once per month. The secondary team also has a PLC. According to study participants, collaboration is more challenging at the secondary level, since secondary teachers are singletons (i.e., the only teacher in the school for his/her content area). Still, they identify elements that are common to all courses (e.g., executive function or organization) to work together around those topics.

Additional sources of professional development occur during regular in-service days. The district has 16 scheduled professional development days throughout the year, to include approximately five to seven days at the beginning of the year, one Friday a month throughout the school year, and two days at the end of the year. According to a study participant, these days are "key for us to be successful." Further, the curriculum coordinators meet regularly (weekly or monthly) to offer teachers individualized support, help them set goals, and assist them as they make progress toward attaining the goals. Teachers in the school collectively have had training on Marzano instructional approaches as well as Love and Logic

classroom management strategies. Additionally, individual teachers have access to content-focused professional development from external sources.

Summary and Alignment with the Evidence-Based Model

In recent years, student performance at Clearmont K-12 has improved, moving the school towards its ambitious goal of having at least 80 percent of students achieve proficiency or above. In fact, the percentage of students who were at or above proficient on the state summative assessment in grades 3 through 8 increased by 15 percentage points over a three-year period and the percentage of high schoolers who were at or above proficient increased 27 points in a year's time.²⁸ In fact, in the 2018-19 school year, 78 percent of Clearmont K-12 secondary students scored at or above proficiency on the WY-TOPP – just two percentage points lower than their goal of 80 percent. While this study is not designed to determine the exact causes of these increases, it is designed to examine the context of the school during these periods of increased student performance. Because of the school and district's small size, many of staff members at Clearmont K-12 must possess the ability to educate students of multiple ages/grades and perform varied roles. Since its restructuring as one K-12 school, these staff have invested time and energy to develop and identify a consistent, shared, and vertically articulated approach to curriculum and instruction. They offer multiple opportunities for students to receive additional support if they are struggling to meet standards after Tier 1 instruction. Additionally, study participants described a family-like atmosphere that is marked by high degrees of collaboration among staff members, supported by instructional coaches.

In many ways, the work at Clearmont K-12 aligns with the Evidence-Based (EB) Model. Specifically, staff implement many of the strategies that undergird the EB Model, including the following:

- Setting high goals for student learning
- Adopting an effective curriculum
- Using instructional coaches to provide on-going professional development
- Providing multiple opportunities for extra help for struggling students (e.g., WIN time for elementary students and the ELA/math methods courses for secondary students).

However, teacher staffing levels at Clearmont K-12 do not completely align with what would be provided under the EB Model. Given the numbers of students, the school would generate 12.29 teachers in the EB Model and 16.51 teachers under the state's Legislative Model. In practice, though, the school has approximately 11.9 teachers serving as core, elective, or CTE teachers. It is important to note that while a comparison of core, elective, and CTE teachers (actual vs. model-generated) is helpful to consider, it may not illustrate the complexity of staffing decisions in the small K-12 schooling context.

²⁸ Please note that the state summative test changed during this time period. See the note on Table 3 for additional information.

Colter Elementary School A Case of an Improving School in Wyoming

Prepared for the Wyoming Legislature Select Committee on School Finance Recalibration

Kathleen Mulvaney Hoyer

Activate Research, Inc.

Partner to Picus Odden & Associates

December 1, 2020

Executive Summary

Colter Elementary School is located in Jackson, Wyoming, and is one of seven elementary schools in Teton County School District #1. In the 2019-20 school year, Colter enrolled 345 students in kindergarten through grade 5. That year, 78 percent of Colter's students were white, 20 percent were Hispanic, 13 percent were eligible for free or reduced-price lunch, and 20 were classified as "at-risk" under the state funding model. Between the 2017-18 and 2018-19 school years, the percentage of students at Colter who scored at or above proficient on the state summative assessment increased 14 percentage points, from 56 to 70 percent. This study describes the context in which these improvements occurred and analyzes how, if at all, the school's strategies and staffing align with the Evidence-Based (EB) Model.

Findings Related to School Context

Colter's structure as a K-5 school is relatively new, as it formerly served students in only grades 3 through 5. Study participants perceived its restructuring to have positively impacted the school in many ways – from enrollment to school and classroom culture to teachers' ability to collaborate with each other and deliver instruction to students. Study participants also described a school with strong building leadership and a principal who has been in the position for several years, which they believe has improved stability and consistency in school operations. Teachers at Colter deliver a vertically-aligned math curriculum and they collaborate frequently in professional learning communities (PLCs) to review student data to make instructional decisions. Colter has an active multi-tiered system of supports (MTSS) team that provides sustained support for students' social-emotional development, and the school provides multiple opportunities for students to receive additional instructional support (within the school day, at a district afterschool program, and during summer school).

Alignment with the Evidence-Based Model

Investigations into how the school operates indicate areas of alignment and divergence with the EB Model. For example, Colter staff use many of the strategies that undergird the EB Model, including analyzing student data, using a vertically-aligned math curriculum, implementing PLCs with instructional facilitators, providing extra help for struggling students, and possessing strong building leadership. Staffing for core and elective teaching positions at Colter, though, are lower than would be provided under the EB Model. While Colter employed 24 teachers (20 core and 4 elective) in 2019-20, the EB Model would have generated 26.49 positions (22.07 core and 4.41 elective).

Introduction

This report is one of ten case studies of Wyoming schools that have improved or demonstrated consistently high student performance in recent years. Taken together, these case studies inform the recalibration of the Wyoming Education Resource Block Grant Model. Specifically, the studies provide information relevant to costing out the basket of goods and services to which Wyoming students are constitutionally entitled. The studies offer insights on how the selected schools have leveraged their resources to foster large improvements in or high levels of student performance. The following sections of this report describe the school's context, student performance, staff, school schedule, approaches to teaching and learning, and professional development. The report draws upon information from two main sources: (1) a review of documents provided by school officials or available online and (2) individual and focus group interviews held virtually via Zoom with 34 members of the school staff that occurred in May 2020.

School Context

Colter Elementary School is located in Jackson, Wyoming, a town of approximately 10,600 residents, per recent Census data. A popular tourist destination, Jackson attracts many visitors, some of whom have chosen to purchase vacation homes in the area. Many families in the community have significant wealth, but others, particularly those who work in the service industry, live with more modest means. Jackson has many Latino residents, and study participants indicated that the sense of community and shared culture among Jackson's Latino residents is strong because many families immigrated to the U.S. from the same area of Mexico.

Colter is one of seven elementary schools in Teton County School District #1. The district's approach to elementary education in Jackson shifted drastically in recent years. In the past, Jackson had two large elementary schools: one that served students in kindergarten through grade 2 and a second that served students in grades 3 through 5. A few years ago, the district decided to open a new, third school with a dual language immersion focus and to structure all three elementary schools as K-5 schools. Study participants reported that this shift led to three changes for Colter: (1) enrollment dropped substantially, (2) the school moved from serving grades 3 through 5 to serving kindergarten through grade 5, and (3) school demographics changed due, at least in part, to many English language learner (ELL) students attending the new dual language immersion school.

Study participants described Colter as a place with high parent and community engagement. Given its new structure as a neighborhood school, Colter students generally live in the area around the school, which is located in southern Jackson. Participants reported that Colter students come from a wide range of socioeconomic backgrounds, and the school is a Title I school. According to school staff, mobility is low and attendance is high.

Student Demographics

Colter Elementary School enrolls children in kindergarten through grade 5. According to information from the Wyoming Department of Education, the school enrolled 345 students in 2019-20 (Table 1). Given that the school employed 20 core teachers in that year, the average class size across the school was 17.25 students, very close to the EB average for a K-5 school.

Table 1. Colter Elementary School student enrollment and average core class size: 2019-20

Grade level	Enrollment	Average core class size
Kindergarten (4 classes)	65	16.25
First grade (3 classes)	44	14.67
Second grade (3 classes)	55	18.33
Third grade (3 classes)	58	19.33
Fourth grade (3 classes)	49	16.33
Fifth grade (4 classes)	74	18.50
Kindergarten through third grade	222	17.08
All grades	345	17.25

Source: Wyoming Department of Education, "Fall Enrollment Summary By School By Grade for School Year 2019-20," and personal communication with school staff.

In 2019-20, 78 percent of Colter's students were white and 20 percent were Hispanic (Table 2). Thirteen percent of the students were eligible for free or reduced-price lunch. Twenty percent of students were classified as "at-risk" under the state funding model (that is, the unduplicated count of students eligible for free or reduced-price lunch, ELL students, or mobile students in grades 6-12).

Table 2. Colter Elementary School student characteristics: 2019-20

Student characteristic	Percentage of student population
Race/ethnicity	
American Indian/Alaska Native	-
Asian	-
Black	-
Hispanic	20
Pacific Islander	-
Two or more races	-
White	78
Eligible for free or reduced-price lunch	13
English language learner	12

- Data not reported to protect student confidentiality.

Note: Detail may sum to greater than total due to rounding.

Source: Wyoming Department of Education, "School Level Fall Enrollment by Ethnicity and Gender," "USDA National Food Lunch Program and Local Free and Reduced Lunch Eligibility - School Level For 2019-20," and data provided to the study team by the Wyoming Legislative Service Office.

School Goals

According to a study participant, while the school takes pride in its trend toward increased student achievement, school staff have not lost a "sense of urgency" around continuing to improve student performance. Another participant noted that Colter staff believe that all students can demonstrate

academic growth. For example, teachers spend time in their professional learning communities (PLCs) reviewing student data and setting SMART (specific, measurable, achievable, realistic, and timely) goals focused on academic growth. Grade-level teams expressed grade-specific and age-appropriate academic goals for students, and the school as a whole also has high goals for student performance (e.g., the school's goal is to have 85 percent of students at or above proficient on the state assessment in the 2020-21 school year). Additionally, staff at Colter indicated that they set behavior targets for students as well through the school's positive behavioral interventions and supports (PBIS) system.

School Culture

Study participants described Colter as a “great place” with a “great” staff, and they reported the presence of positive relationships with family, camaraderie among teachers, and community among students. Comments about school culture indicated that study participants perceived the positive culture to stem from at least three sources.

First, several study participants indicated that Colter has a strong administration. According to school staff, the principal position at Colter used to experience high turnover, but the current principal has been in the role for a number of years now. Participants noted that this consistency is coupled with high-quality leadership. Teachers indicated that the principal is supportive and that he pairs high expectations for teachers with ensuring that staff have sufficient resources to achieve their goals, for example.

Second, teachers reported that school culture has improved since Colter's transition to the smaller K-5 format. Teachers described the transition as fostering a welcome change of pace, since they perceived that work was “hectic” and “highly stressful” when the school was a larger grade 3-5 school. Teachers indicated that, in the new format, they have greater opportunities for collaboration because their grade-level teams are a more manageable size. They also reported that the school's smaller size allows teachers to cultivate better relationships with students.

Third, study participants noted that Colter staff possess a sense of “collective efficacy.” They embrace difficult work and perceive that they have the resources required to educate students to a high level of proficiency. These resources include small class sizes, a dedicated work force (including teachers and several staff members who support students' social emotional development as well as sufficient numbers of special educators), and adequate technological resources.

Student Performance

Between 2017-18 and 2018-19, the percentage of students at Colter who scored at or above proficient on the state summative assessment increased 14 percentage points, from 56 to 70 percent (Table 3).

Table 3. Percent of Colter Elementary School students who scored at or above the proficient level on the state summative assessment: School years 2017-18 through 2018-19

Year	Percent of students at proficient or above
2017-18	56
2018-19	70

Note: Wyoming has changed its summative assessment in recent years and began giving the current test (the Wyoming Test of Proficiency and Progress, or WY-TOPP) in 2017-18. This table shows only the 2017-18 and 2019-20 school years because these are the only two years with assessment data available since the school has had the K-5 structure.

Source: Data provided to study team by Wyoming Department of Education.

School Staff

According to the Wyoming Department of Education, the average school salary for an elementary school teacher in Teton County School District #1 in 2019-20 was \$77,531, which was considerably higher than the statewide average salary for an elementary school teacher (\$60,194).²⁹ As shown in Table 4, Colter has 20 core teachers: 4 for kindergarten, 3 each for first through fourth grade, and 4 for fifth grade. Five teachers who each work at a level of 0.8 FTE offer specials courses in music, art, computers, physical education, and Spanish. These teachers are not full-time at Colter because they spend a small portion of their time traveling to small outlying schools in the district.³⁰ Colter has 5.5 FTEs for special educators.

²⁹ Data for Teton County School District #1 retrieved from the “All Staff by Category and District with Average Salaries” database found at <https://edu.wyoming.gov/data/statisticalreportseries-2/>. Data for Wyoming retrieved from “State Staff by Category with Average Salaries” at the same site.

³⁰ Study participants noted that this situation will change next school year, when the elective teachers will work only at Colter.

Table 4. Colter Elementary School staffing levels, 2019-20

Category	FTE
<i>Licensed staff</i>	
Core teachers	20.00
Elective teachers	4.00
Special education teachers, self-contained (severe & profound)	2.00
Special education teachers	3.50
ESL teachers	1.00
Tutors/Tier 2 interventionists	3.50
Librarian	0.80
Gifted and talented teachers	0.60
<i>Non-licensed staff</i>	
<i>Aides</i>	
Instructional professionals	6.00
Special education self-contained paraprofessionals (severe & profound)	3.00
Special Education paraprofessionals	2.00
Library paraprofessionals	0.50
<i>Administration</i>	
Principal	0.75
Assistant principal	1.00
Clerical	2.50
<i>Pupil support</i>	
Counselor	1.00
Nurse	0.50
School psychologist	0.50
Speech language pathologist	1.00
Occupational therapist	as needed

Source: Conversations with school staff.

The school employs one English language development (ELD) teacher to support ELL students as well as 3.5 intervention positions which include two Reading Recovery teachers, one person who splits time between special education and Reading Recovery, and one multi-tiered system of supports (MTSS)/Title I teacher. The school has a nearly full-time librarian and 0.6 of an FTE of a gifted and talented teacher. Colter teachers receive support from instructional facilitators (one who specializes in math and another who specializes in English language arts [ELA]), but these personnel are staffed at the district rather than school level.

Several instructional paraprofessionals support the work of the school. Five paraprofessionals work with students with special needs, one paraprofessional works half-time in the library, and six other paraprofessionals support instruction in a variety of ways (three support literacy instruction, two support Title I activities, and one supports the electives courses).

Colter's principal works nearly full-time in this capacity, although he also works at the district level to support ELL programming. The school has a teacher on special assignment (TOSA), who functions as an assistant principal. The TOSA position is part of Teton County's leadership development program. One secretary, one attendance secretary, and a translator (working at 0.5 of an FTE) provide clerical support for the school.

Several pupil support professionals also provide assistance to Colter students. Colter has a full-time counselor, a full-time speech language pathologist, a part-time school psychologist, a part-time nurse, and support from an occupational therapist as needed (as this person is on contract with the district). A school resource officer who works at all of the schools in town provides support as needed to Colter, and the school has two custodians and two food service workers (not shown in table).

School Schedule

Colter operates on a five-day school week. The teacher day is 8 hours and runs from 7:45 am to 3:45 pm; the student day runs from 8:00 am to 2:45 pm. Students typically have 50 minutes per day for specials, but they have two specials periods once per week, since the school offers six specials.

Approaches to Curriculum, Instruction, Intervention, and Assessment

Curriculum Development

According to study participants, the district has been moving recently to guaranteed and viable curriculum (GVC) for math and ELA.³¹ The district has selected curricular materials for math, but the ELA curriculum adoption process is still underway. Study participants indicated that the district has a task force for ELA curriculum and, at the time of data collection, the district was currently working to identify curriculum, create common assessments, develop thematic lessons that incorporate science and social studies, and create proficiency scales.

Curricular Program

As noted above, the district adopted math materials through the GVC development process. Study participants shared that they began to use these materials – Bridges math – about three years ago. Multiple study participants expressed positive reactions to the adoption of Bridges. In the words of one staff member, the school is now “seeing dividends” due to the adoption of these materials. Across grade levels, teachers reported consistent use of Bridges, and one study participant attributed school success to the implementation of a vertically-aligned mathematics curriculum. While study participants noted that they primarily use Bridges materials, they also noted that they supplement as needed from other sources (e.g., Engage NY, Dreambox, and Howard County materials).

Given the ongoing nature of the ELA curriculum adoption process, ELA materials are not yet standardized across the school or district. Study participants reported the use of a wide variety of ELA materials, including Literacy Footprints, Fountas and Pinnell leveled readers, Imagine Learning, and whole-class novels.

Instructional Program

In most grades at Colter, teachers work in self-contained (i.e., non-departmentalized) classrooms. Fifth grade teachers, however, are departmentalized. Across the school, students receive approximately 70 to 140 minutes of daily instruction in ELA (including both reading and writing) and approximately 55 to 95 minutes of instruction in math daily. Teachers reported the use of workshop or guided instruction in both reading and math. In both subjects, teachers indicated that they start instruction with a mini lesson

³¹ A GVC is intended to “guarantee that specific content is taught in specific courses and grade levels...[and] that there is enough instructional time available to actually teach the content identified as important” (quote from https://www.marzanoresources.com/resources/tips/lol_tips_archive).

(ranging in length from approximately 20-30 minutes), which is followed by small group, partner, or independent work. They also described use of guided release of responsibility instructional techniques (e.g., “I do, we do, you do”). Instruction in math includes “number corner,” which is part of the Bridges curriculum, as well as activities such as number talks, math games, and rich math tasks. ELA instruction includes journaling tasks, the use of graphic organizers, and balanced literacy approaches. In some classrooms – particularly in kindergarten through grade 3 – paraprofessionals support instruction by working with students in small groups on phonics instruction.

Interventions for Struggling Students

Academic Interventions

All students have access to additional academic support during daily “what I need” (“WIN”) time, 25-45 minutes dedicated to providing extra instruction for students to master specific skills or to delivering specialized interventions (e.g., Tier II and III interventions, ELD instruction). The WIN period is a key part of Colter’s MTSS approach and ensures that all students – regardless of whether or not they have an IEP – receive extra help from certified content and intervention teachers. Colter staff use several different types of curricular materials for intervention, including Reading Recovery, Wilson Reading’s Foundations, the REWARDS Reading Intervention, Leveled Literacy Intervention, Read Naturally, Dreambox, Touch Math, and Imagine Learning. The school offers opportunities for homework help after school, and Colter students can enroll in afterschool programming at the nearby Teton Literacy Center. Colter also offers a summer school program.

Behavioral Interventions

As a Positive Behavioral Interventions and Supports (PBIS) school, Colter has a culture of rewarding positive behaviors. For example, one study participant described the school’s “gotcha” ticket system, wherein school staff give students the tickets for engaging in positive behaviors and students can trade tickets in for special prizes or experiences. Additionally, they regularly hold Colter Pride events, which serve as an opportunity to recognize students’ positive behaviors.

Colter’s MTSS team provides assistance for those students who struggle behaviorally. The MTSS team – described by one study participant as a “phenomenal” means of support for students – includes the school counselor, school psychologist, ELD teacher, math interventionist, reading interventionist, and an administrator. To assist classroom teachers in addressing students’ behavioral needs, the MTSS team sends them an “intervention matching survey,” which helps identify proper supports for students. These supports might include check in/check out as well as individual or small group sessions with the counselor. The MTSS team meets at least once per week to progress monitor students who are receiving behavioral interventions and to problem solve regarding how best to support struggling students.

Assessments

According to a study participant, teachers at Colter have focused on the use of assessment data in their professional learning communities (PLCs) in recent years. Another participant notes that their PLCs are “pretty data driven” and that they use assessment data to make decisions about lesson planning and grouping students for WIN period interventions. Colter staff use a variety of assessments for different purposes. For example, in addition to the summative WY-TOPP, the school administers the interim WY-TOPP for benchmarking. They use easyCBM and aMath from FastBridge alongside the interim WY-TOPP to assist with benchmarking. Data for progress monitoring, too, comes from multiple sources, including

easyCBM and FastBridge, Fountas and Pinnell, and the WY-TOPP modular assessments. According to some teachers, while the WY-TOPP modular assessments do not provide all of the necessary data for progress monitoring or short-cycle assessment purposes (i.e., because the data are not broken down into domains), they can help students practice on the WY-TOPP format and assessment platform. Colter teachers reported the use of common classroom assessments, which could come from the Bridges curriculum or from district-created assessments. Teachers also reported creating assessments with the help of district instructional facilitators. In terms of less formal formative data, teachers reported the use of exit tickets, teacher observation of student work, and running records. Social-emotional progress monitoring data come from Review360 and Panorama, and English language acquisition information comes from the Test of English Language Learning (TELL) and from WIDA ACCESS.

Professional Development

Teachers at Colter have access to professional development (PD) from several different sources: in-school PLCs, other in-school offerings, and district offerings. Colter teachers reported an increased focus on PLCs in recent years, and most study participants indicated that efforts to focus attention on PLCs in general and PLC-driven data use in particular may be contributing to school success. In fact, one staff member indicated that “PLCs are the cornerstone” of their PD process and another dubbed them “time well spent.” Others echoed and extended the theme by noting that PLCs focus on matters that directly impact their classrooms and students (e.g., planning lessons and looking at student data) and, thus, are now a major and more meaningful source of support. While most participants had positive perceptions of Colter’s use of PLCs, one participant described a perception that they are still a work in progress. The PLCs, which are generally organized around grade-level teams, meet at least once per week for 50 minutes; for these formal meetings, an administrator and instructional facilitator join the team. The grade-level teams may also meet informally at other times. During PLC time, teams look at data from pre- and post-tests, and make decisions about instruction, plan lessons for future units, and make decisions about student grouping for interventions.

Other school-level PD takes place when Colter staff members with specialized expertise train their colleagues and then follow up with “office hours” where teachers can get ongoing assistance as needed. These PD opportunities often focus on different platforms, tools, or materials that teachers can use in their practice. In the words of one participant, this type of colleague-to-colleague training is “powerful” and “targeted.” Additional in-school PD has occurred through a reading studio model – wherein Colter teachers observed each other implementing guided reading strategies – and in opportunities for Colter teachers to receive support from the district instructional facilitators.

District-based PD occurs in the form of PD days with content-area colleagues throughout the district. Additionally, study participants reported that the district has full-district trainings on areas of importance such as social-emotional learning, diversity, and whole-child instruction/support. The district also supports teachers seeking PD from external professionals, such as experts at the University of Wyoming. The district implements a new teacher program, which includes mentoring and monthly PD sessions with principals.

Summary and Alignment with the Evidence-Based Model

In recent years, Colter Elementary School has improved students’ performance. In fact, the percentage of Colter students who scored at or above proficiency on the state summative assessment increased 14

points between 2017-18 and 2018-19, from 56 to 70 percent.³² Several factors have likely influenced this increase, and this study is not designed to identify the specific strategies related to specific increases. What this study does is illuminate the context in which these improvements occurred. The school recently underwent a major structural change, which study participants perceived to have positively impacted the school's enrollment, environment, and ability to deliver instruction. Study participants also described a school with strong building leadership, a vertically-aligned math curriculum (part of a GVC that ensures all teachers are covering the same content), PLCs that regularly review student data, ample support for students' social-emotional development, and multiple opportunities for students to receive additional support.

Investigations into how the school operates indicate areas of alignment with the Evidence-Based (EB) Model. For example, many of the strategies Colter staff use align with the EB Model. These strategies include the following activities:

- Implementation of PLCs with support from instructional facilitators
- Analysis of interim and short-cycle student performance data
- Investment in a vertically-aligned curriculum for math
- Provision of multiple opportunities for students to obtain extra help (in the school day, afterschool, and during summer), including a WIN period that offers all students support from classroom and intervention teachers
- Strong building administration with stability in the principal position.

While core class sizes at Colter are similar to those in the EB Model, staffing for core and elective teaching positions (taken together) at Colter, though, are modestly lower than both the EB Model and the state's Legislative Model. While Colter employed 24 teachers (20 core and 4 elective) in 2019-20, the EB Model would have generated 26.49 positions (22.07 core and 4.41 elective) and the Legislative Model would have generated 30.49 positions (25.41 core and 5.08 elective).

³² Please note that the state summative test changed during this time period. See the note on Table 3 for additional information.

Greybull High School

A Case of an Improving School in Wyoming

Prepared for the Wyoming Legislature Select Committee on School Finance Recalibration

Kathleen Mulvaney Hoyer

Activate Research, Inc.

Partner to Picus Odden & Associates

December 1, 2020

Executive Summary

Greybull High School (GHS) is located in Greybull, Wyoming, and it is the only high school in Big Horn County School District #3. GHS enrolled 136 students in the 2019-20 school year. In that year, 76 percent of students at the school were white and 20 percent were Hispanic. About one-third of students (33 percent) were eligible for free or reduced-price lunch and 37 percent were “at-risk” as defined by the state funding model. In recent years, student performance on the end of year test has improved. Specifically, the percentage of GHS students who scored at or above the proficient level on the state summative test increased 26 percentage points between the 2013-14 and 2018-19 school years, from 35 to 61 percent. The purpose of this report is to describe the context in which these improvements occurred and to compare the school’s strategies and staffing to the Evidence-Based (EB) Model.

Findings Related to School Context

According to school staff, teachers at the school are very experienced and many have worked at the school for several years. These teachers hold high expectations for students – in fact, the school goal is for 100 percent of students to attain proficiency on the state summative assessment and for all students to graduate from GHS. Teachers reported the use of a common curriculum that is vertically aligned not just at the high school level but also with the middle school. GHS sets aside dedicated time for all students to receive extra support, and GHS staff track intervention time closely to ensure that it is spent effectively. Further, teachers reported that they have sufficient resources for their work (e.g., technology, collaborative peers, and a supportive administration).

Alignment with the Evidence-Based Model

GHS staff members rely on many strategies that align with the EB Model, including setting ambitiously high goals for students, employing a talented teacher workforce, implementing a common and vertically aligned curriculum, providing multiple supports for struggling students, using data to inform instructional decisions, and implementing professional learning communities. In terms of teacher staffing levels, GHS employs a higher teacher FTE than would be allocated under the EB Model. That is, GHS has 13.1 teacher FTEs (8 core, 2.3 elective, and 2.8 CTE). This number is higher than the small-school allocations recommended under the EB Model (7 teachers).

Introduction

This report is one of ten case studies of Wyoming schools that have improved or demonstrated consistently high student performance in recent years. Taken together, these case studies inform the recalibration of the Wyoming Education Resource Block Grant Model. Specifically, the studies provide information relevant to costing out the basket of goods and services to which Wyoming students are constitutionally entitled. The studies offer insights on how the selected schools have leveraged their resources to foster large improvements in or high levels of student performance. The following sections of this report describe the school's context, student performance, staff, school schedule, approaches to teaching and learning, and professional development. The report draws upon information from two main sources: (1) a review of documents provided by school officials or available online and (2) individual and focus group interviews held virtually via Zoom with 11 members of the school staff that occurred in April 2020.

School Context

Greybull High School (GHS) is located in Greybull, Wyoming, situated in the high basin between two mountain ranges in north central Wyoming. Greybull is close to many public lands, and it is only about an hour outside of the entrance to Yellowstone National Park. Outdoor recreation is very popular, and activities like hunting, fishing, hiking, mountain climbing, and four-wheeling are important parts of life in the area. Major industries include agriculture, mining, and tourism (due to Greybull's proximity to Yellowstone). Because the county seat is relatively close, some in the town work in county government. Most GHS parents are employed at ranches, nearby bentonite plants, or the railroad switch station. Some work as welders or employees who manufacture materials for the factories. According to a study participant, many families have multiple jobs.

GHS is the only high school in Big Horn County School District #3. The high school building is located right next to a newly constructed middle school building, and the two buildings share some common areas, such as the cafeteria. Study participants reported that student mobility is relatively low. Enrollment has dropped a bit in recent years, which study participants attribute to real changes in population (i.e., loss of some railroad jobs and reductions in hiring at the bentonite plant) as well as to a perception that student enrollment a few years ago just happened to be higher than usual due to natural fluctuation in the school-age population.

Student Demographics

According to data from the Wyoming Department of Education, GHS enrolled 136 students in 2019-20 (Table 1). According to information from the Wyoming Department of Education, the average English language arts (ELA) and math class size was approximately 12.35 students.³³

³³ Calculation provided to the study team by the Wyoming Department of Education, based on analysis of combined wde684 student, wde684 section, and wde638 course data sets.

Table 1. Greybull High School student enrollment: 2019-20

Grade level	Enrollment
9	42
10	34
11	25
12	35
Total	136

Source: Wyoming Department of Education, "Fall Enrollment Summary By School By Grade for School Year 2019-20."

In 2019-20, most students at the school were white (76 percent), followed by Hispanic (20 percent). About one-third of students (33 percent) were eligible for free or reduced-price lunch (Table 2). Thirty-seven percent of students were classified as "at-risk" under the state funding model (that is, the unduplicated count of students eligible for free or reduced-price lunch, ELL students, or mobile students in grades 6-12).

Table 2. Greybull High School student characteristics: 2019-20

Student characteristic	Percentage of student population
Race/ethnicity	
American Indian/Alaska Native	-
Asian	-
Black	-
Hispanic	20
Pacific Islander	-
Two or more races	-
White	76
Eligible for free or reduced-price lunch	33
English language learner	-

- Data not reported to protect student confidentiality.

Note: Detail may not sum to total due to rounding.

Source: Wyoming Department of Education, "School Level Fall Enrollment by Ethnicity and Gender," "USDA National Food Lunch Program and Local Free and Reduced Lunch Eligibility - School Level For 2019-20," and data provided to the study team by the Wyoming Legislative Service Office.

School Goals

GHS staff have a mindset that all students can succeed, and their explicit goal is for 100 percent of students to be proficient on the Wyoming Test of Proficiency and Progress (WY-TOPP) summative assessments in reading and math. According to a study participant, "although [staff] may fall short" of that goal, they perceive the goal to be "reasonable" because they really believe every student can succeed. While school staff are proud of overall high levels of achievement in the school, they recognize that some students are still not scoring at proficient levels. One staff member shared that they do not

want to experience a plateau in achievement. Rather, they want to focus on and provide support to those students who have not yet reached proficiency.

In addition to universal proficiency on WY-TOPP, school staff also hold a collective goal to maintain a high graduation rate. According to a study participant, the school is proud of its consistently high graduation rate. Across the school, educators want students to graduate from high school successfully and go on to postsecondary education or a career. In focus groups, teachers suggested that their small school size may help them achieve this goal, since all of the teachers know all the students and can tailor their support to students' individual postsecondary goals.

School Culture

Study participants consistently described a culture in which school staff work hard to build strong, caring relationships with students. One teacher noted that the staff care not just about students' academic performance but also their social-emotional development. While the school certainly stresses academics, staff at GHS do not view teaching as one-dimensional and, thus, the teachers help the students work through challenges. According to study participants, it may not be the case that every teacher knows every student in the school, but all students have at least one teacher who really connects with them. In the words of one teacher, "Every student feels they can go to an adult in the building."

Study participants described a context where teachers have several resources to support their work. One such resource is the quality of their peers. According to study participants, the school is staffed with "seasoned teachers" who are "very experienced." Another resource comes in the form of support (autonomy as well as professional development) from school and district leadership to implement instructional approaches that they perceive will help students succeed. A third set of resources is tangible: study participants said that they have the requisite physical resources (e.g., laptops and other technology) to do their work.

Student Performance

Between the 2013-14 school year and the 2018-19 school year, the percentage of students at or above proficient on the state summative assessment increased by 26 percentage points (Table 3). As noted in

the section on school goals, while the school continues to strive to attain proficiency for all students, gains over the last several years have made strong inroads toward that objective.

Table 3. Percent of Greybull High School students who scored at or above the proficient level on the state summative assessment: School years 2013-14 through 2018-19

Year	Percent of students at proficient or above
2013-14	35
2014-15	26
2015-16	36
2016-17	39
2017-18	40
2018-19	61

Note: Wyoming has changed its summative assessment in recent years and began giving the current test (the Wyoming Test of Proficiency and Progress, or WY-TOPP) in 2017-18. Accordingly, the data for these calculations come from different assessments over time (e.g., the formerly used Proficiency Assessments for Wyoming Students [PAWS] and the WY-TOPP). While changes in test administration make cross-year comparisons more difficult, using data from multiple assessments allows for review of scores over a longer time period.

Source: Data provided to study team by Wyoming Department of Education.

In 2018-19, the GHS graduation rate was 90 percent (Table 4). Graduation rate differences existed between some groups of students. For example, the graduation rate for female students (96 percent) was higher than the graduation rate for male students (83 percent).

Table 4. Federal four-year graduation rates for Greybull High School, by student characteristics: 2018-19 cohort

Student characteristic	Graduation rate (%)
All students	90
English language learners	-
Gender	
Female	96
Male	83
Homeless students	-
Eligible for free or reduced-price lunch	88
Migrant students	-
Race/ethnicity	
American Indian	-
Asian	-
Black	-
Hispanic	-
Pacific Islander	-
Two or more races	-
White	90

- Data not reported to protect student confidentiality.

Note: A cohort year is a grouping of students expected to graduate on-time (4 years) at the end of the same school year (the cohort year, which in this table is 2018-19). The bulk of each cohort consists of all the Wyoming students entering 9th grade in the same year, which is then adjusted for students transferring in and out of state. The four-year graduation rate is the percentage of students in a cohort graduating in 4 or fewer years.

Source: Wyoming Department of Education, "Wyoming School Graduation Rates: Federal Graduation Rates for the 2018-19 Cohort."

School Staff

According to the Wyoming Department of Education, the average school salary for a high school teacher in Big Horn County School District #3 in 2019-20 was \$63,672, which was slightly lower than the statewide average salary for a high school teacher (\$64,893).³⁴

³⁴ Data for Big Horn County School District #3 retrieved from the "All Staff by Category and District with Average Salaries" database found at <https://edu.wyoming.gov/data/statisticalreportseries-2/>. Data for Wyoming retrieved from "State Staff by Category with Average Salaries" at the same site.

Table 5. Staffing at Greybull High School, 2019-20

Category	FTE
<i>Licensed Staff</i>	
Core teachers	8.00
Elective teachers	2.30
Career and technical teachers	2.80
Special education self-contained teachers (severe & profound)	1.00
Special education teachers	2.00
Tutors/Tier 2 interventionists	0.13
Librarian	0.30
<i>Non-licensed staff</i>	
<i>Aides</i>	
Special education self-contained (severe & profound) paraprofessionals	2.00
Special education paraprofessionals	2.00
Library paraprofessionals	0.50
ELL paraprofessionals	1.00
<i>Administration</i>	
Principal	1.00
Athletic director	0.30
Clerical	2.00
<i>Pupil support</i>	
Counselor	1.00
Nurse	0.33
Psychologist	0.33

Source: Conversations with school staff.

GHS has eight core teachers: one teacher dedicated to ELA, one who teaches ELA and social studies, one who teaches only social studies, two who teach math, two who teach science, and one who teaches Spanish. In total, approximately five FTEs teach electives as well as career and technical education (CTE) courses: just over two FTEs of teachers offer electives in art, music, health, and physical education. Just under three FTEs of teachers offer CTE courses in woodworking, welding, agriculture, publications, and computer science. Three special education (resource) teachers work in the school. One mostly teaches students with very severe special needs, though this teacher also works with students with less severe needs this year. An intervention teacher provides Tier 2 instruction for one period per day, and the school has access to about a third of a certified librarian's time. The school does not have English as a second language (ESL) teachers, or teachers for gifted and talented students. It also does not have any instructional facilitators, although study participants reported receiving assistance from a district-level instructional facilitator on certain matters (e.g., curriculum adoption).

GHS employs no supervisory or instructional aides, but four paraprofessionals work with students with special needs. The school has half of a paraprofessional's time to work in the library, and another paraprofessional works with English language learner (ELL) students.

School administration includes one principal and 0.3 FTE for an athletic director. Two staff members provide clerical support. In terms of pupil support, the school has one school counselor. No nurse is staffed on-site, though the high school can access the nurse who is stationed at the nearby elementary school. Similarly, the school has no on-site psychologist, though they can access a psychologist who is also housed at the elementary school.

School Schedule

The school has an eight-period day from 8:00 am to 3:40 pm on Mondays through Thursdays, where the eighth period is reserved for an academic success period. On Fridays, the day has seven periods and it runs from 8:00 am to 1:00 pm.

Approaches to Curriculum, Instruction, Intervention, and Assessment

Curricular Program

According to a study participant, GHS follows the Hathaway guidelines very closely, and every GHS graduate satisfies the basic course requirements for the Hathaway program because of the course graduation requirements at the school. Over the past few years, the school has pushed to increase the number of concurrent/dual enrollment classes that GHS students take. On campus, GHS offers several college-level classes, including college English, art, Spanish, and science. It also offers AP calculus.

The 2018-19 Greybull High School student handbook outlines that students must obtain the following credits to graduate:

- Four credits in English
- Three credits in mathematics
- Three credits in science
- Three credits in social studies
- One credit in foreign language
- One credit in fine and performing arts
- One credit in physical education
- Two credits in career and technical education.

Curricular Materials

Similarities exist with respect to math and ELA materials. Most math courses use Pearson textbooks aligned to the Common Core standards, but the precalculus and calculus courses use Larson textbooks. The high school and middle school teachers selected new math curriculum prior to the 2019-20 school year, and they based their choice on the degree to which the materials aligned with priority standards on the WY-TOPP blueprints. Although the specific Pearson texts they chose were new, the school has used Pearson texts for math for approximately nine years. ELA teachers, too, selected Pearson texts that are aligned with the Common Core. They selected these materials to ensure continuity between middle and high school, because the middle school uses Pearson texts as well.

Other core courses use varied texts. Many science courses use Glencoe/McGraw Hill texts, though teachers supplement the text with materials from the Internet. Additionally, some of the higher-level courses use teacher-created curriculum. The science curriculum includes a course on independent study, and the school recently received a grant to build a new biotechnology lab. Thus, many of the students are doing medical research for their independent study. In social studies, the school uses Houghton Mifflin materials for the government course, as well as Holt and McGraw Hill books for other social studies courses. Spanish courses rely on a variety of instructional resources, including materials from the Teaching Proficiency through Reading and Storytelling (TPRS) books series.

The career and technical education and elective programs, too, offer rich curricula. For example, the industrial arts curriculum is based on a wide variety of materials, including materials from Pearson, resources through the American Welding Society – since the school can offer welding certificate programs – and input from members of community industries. Another example is the art curriculum. The art teacher has a relationship with the Yellowstone Art Museum in Billings, Montana. The teacher structures a course around a visit to the museum and student creation of art. When students have completed the course, the gallery displays the students' work. The art teacher also teaches some college-level courses, which is supported by Board of Cooperative Educational Services (BOCES) funds.

Instructional Program

Teachers in the school reported the use of a variety of instructional methods. While teachers said that they use some whole-group instruction (particularly in math, science, and, for some courses, in social studies), student-centered instructional methods are common. For example, math and Spanish classes use small group work frequently and ELA and social studies courses are heavily discussion-based. Industrial arts classes use the workshop model, and science courses use many lab assignments. According to school staff, teachers and students in the school have access to several electronic resources to facilitate these instructional strategies – they are 1:1 with Chromebooks, and teachers have access to instructional technology such as interactive whiteboards.

Interventions for Struggling Students

GHS staff have built time for ongoing, intentional intervention into the school day. Each day (Monday through Thursday) ends with an intervention period for all students. They use this period to focus on WY-TOPP preparation, ACT preparation, and additional support for students who are struggling. Classes are small (approximately 8-12 students), so when students stay in their “home” room for the intervention period, they receive relatively individualized attention. Students do not always stay in their home room for this period, however. The school tracks the use of this time closely. It maintains a spreadsheet with information on every student's needs, and teachers request to work with students during the intervention period based on a number of prioritized reasons. Higher priority reasons include focusing on preparation for WY-TOPP in areas where the student is struggling, and lower priority reasons include student requests.

GHS offers afterschool intervention on Fridays, when the student school day ends earlier than it does on the other days (at 1:00 pm). Teachers also sometimes meet with students during lunchtime, and the school has worked out an agreement that paraprofessionals, too, can spend extra time working with students during lunch and afterschool.

One study participant attributed school success to a culture of high expectations and extensive support for students with special needs. This school staff member described a perceived shift in how the school approaches expectations for special education students, such that current shared understanding across the school is that students with special needs should be able to take any high-level course with the proper support – and school staff perceived that they have enough staff to support the students so that they can achieve success in these higher-level courses. According to this staff member, the extra support for struggling students may have led to the students who had historically scored lower on the state summative assessment to demonstrate increased proficiency, which is good for not only individual students but also the whole school.

Assessments

GHS staff members use summative WY-TOPP and ACT data to make school-wide goals. They use interim WY-TOPP data to create groups for targeted instruction in ELA and math. Furthermore, teachers create and administer common unit assessments across multiple subjects (including ELA and math). Finally, according to school staff, GHS teachers check in with the students frequently. Teachers reported multiple methods of formative assessment, including observation of student in-class work, exit tickets, quizzes, and review of more in-depth work such as laboratory, oral, or written assignments (depending on the subject area).

Professional Development

Teachers at GHS report a range of professional development (PD) opportunities, from participation in external PD to district- or school-based PD to PD in school through collaboration with colleagues. In terms of external PD, study participants noted that they are “highly encouraged” by the district to attend external PD conferences or other opportunities, and they described a perception that the “district is very supportive” of teachers seeking out this type of PD.

The district- and school-based PD center around a few main areas of focus each year. Recent examples include reading, the use of technology, and the implementation of professional learning communities (PLCs). These types of PD sessions occur during in-service days throughout the school year when students are not in school and classes are not in session. Sometimes, the district or school brings in external consultants for these in-service days, but sometimes the district taps into school-level expertise for these trainings by having teachers present to their colleagues.

Additional professional growth occurs at the school as teachers collaborate with each other. Approximately two years ago, the school implemented PLCs. The PLCs are primarily content-based or wide-area-based (e.g., fine arts). In addition to working on subject-specific content, the PLCs contribute to the school improvement plan, set goals for the school, and determine how to help students improve. PLCs also strategize on how to support special populations of students (e.g., ELL students, low-SES students). PLCs meet every couple of weeks formally, though they meet more frequently on an informal basis. The high school PLCs also periodically meet with the middle school teachers in their subject areas to work on alignment across school levels.

Summary and Alignment with the Evidence-Based Model

Between the 2013-14 and 2018-19 school years, the percentage of GHS students who scored at proficient or above on the state summative assessment increased 26 percentage points, from 35 to 61

percent.³⁵ This increase is likely the result of many factors, and this study is not designed to identify these specific factors. What this study does is illuminate the context in which these improvements occurred. Focus groups with school staff describe a context where veteran teachers have high expectations for students and provide multiple opportunities for students to master course content. Teachers use common and vertically aligned curriculum and they report that they have many resources including technology, collaborative peers, and a supportive administration.

Many strategies that GHS staff employ align with the strategies that undergird the Evidence-Based (EB) Model. Specifically, GHS staff engage in the following activities:

- Setting high goals for students
- Employing a talented teacher workforce
- Implementing a common and vertically aligned curriculum
- Providing multiple supports for struggling students (particularly within the school day during the academic success period)
- Using data to inform decisions on instruction and intervention, including common end-of-unit assessments in multiple content areas
- Collaborating with colleagues in PLCs.

In terms of staffing for teachers, GHS employs a higher teacher FTE than would be allocated under the EB Model or the Legislative Model. That is, GHS has 13.1 teacher FTEs (8 core, 2.3 elective, and 2.8 CTE). This is higher than what would be allocated under the EB Model (7.81 teachers) and the Legislative Model (10 teachers).

³⁵ Please note that the state summative test changed during this time period. See the note on Table 3 for additional information.

Laramie High School A Case of an Improving School in Wyoming

Prepared for the Wyoming Legislature Select Committee on School Finance Recalibration

Kathleen Mulvaney Hoyer

Activate Research, Inc.

Partner to Picus Odden & Associates

December 1, 2020

Executive Summary

Laramie High School (LHS) is located in Laramie, Wyoming, the third largest city in the state. A part of Albany County School District #1, LHS educates students in grades 9 through 12. Ninth grade is a recent addition, as the school only served tenth- through twelfth-graders until approximately four years ago. In the 2019-20 school year, LHS enrolled 1,048 students. In that same year, 74 percent of LHS students were white, 18 percent were Hispanic, and 19 percent were eligible for free or reduced-price lunch. Twenty-one percent of LHS students were identified as “at-risk” as defined by the state’s funding formula. In recent years, student achievement at LHS has improved. Specifically, the percentage of LHS students who scored proficient or above on the state’s summative test increased 14 percentage points between the 2013-14 and 2018-19 school years, from 48 to 62 percent. This study describes the context in which these improvements occurred and analyzes how, if at all, the school’s strategies and staffing align with the Evidence-Based (EB) Model.

Findings Related to School Context

Study participants described LHS as a school with strong building leadership and extensive teacher collaboration in professional learning communities (PLCs). Through these PLCs, LHS teachers develop guaranteed and viable curriculum (GVC), which provides students access to common, vertically aligned curriculum and common assessments. All LHS students have access to additional instructional support through an intervention and enrichment (I&E) period, and those students who would benefit from even more assistance have opportunities to attend what staff termed “in-time remediation” during afterschool intervention periods. LHS staff also endeavor to support students’ social-emotional development through relationship-building and, when needed, caring support for more extreme behavior challenges.

Alignment with the Evidence-Based Model

LHS staff engage in many strategies that undergird the Evidence-Based (EB) Model. In particular, they participate in data-based decision making regarding curriculum, instruction, and interventions; implement PLCs and collaborate on matters of instruction; provide multiple opportunities for intervention for struggling students; and deliver common, vertically aligned curriculum. However, LHS core and elective teacher counts differ from what would be generated under the EB Model. That is, core teacher counts at LHS are similar to what would be generated under the EB Model, but LHS employs greater numbers of elective and CTE teachers than would be provided by the EB Model.

Introduction

This report is one of ten case studies of Wyoming schools that have improved or demonstrated consistently high student performance in recent years. Taken together, these case studies inform the recalibration of the Wyoming Education Resource Block Grant Model. Specifically, the studies provide information relevant to costing out the basket of goods and services to which Wyoming students are constitutionally entitled. The studies offer insights on how the selected schools have leveraged their resources to foster large improvements in, or high levels of, student performance. The following sections of this report describe the school's context, student performance, staff, school schedule, approaches to teaching and learning, and professional development. The report draws upon information from two main sources: (1) a review of documents provided by school officials or available online and (2) individual and focus group interviews held virtually via Zoom with 16 members of the school staff that occurred in April 2020.

School Context

Laramie High School (LHS) is located in Laramie, Wyoming, the third largest city in the state (with just under 33,000 residents, according to Census data). Laramie is home to the University of Wyoming, and school staff reported a perception that the university's presence fosters diversity in the town. Laramie is also close to the Colorado border, and a study participant indicated that families from Colorado are drawn into the area because of Wyoming's education policies – particularly the Hathaway Scholarship Program. Laramie's major employers include the university, a local hospital, and the school district. Other industries include ranching and farming. LHS is in Albany County School District #1 (ASCD1) and it educates students in grades 9 through 12. The school added the ninth grade about four years ago; before that, it only educated tenth- through twelfth-graders. When the school added ninth grade, it moved into a new building.

Student Demographics

Information from the Wyoming Department of Education indicates that Laramie High School enrolled 1,048 students in 2019-20 (Table 1). According to information from the Wyoming Department of Education, the average English language arts (ELA) and math class in 2019-20 was 22.8 students.³⁶

Table 1. Laramie High School student enrollment: 2019-20

Grade level	Enrollment
9	301
10	269
11	248
12	230
Total	1,048

Source: Wyoming Department of Education, "Fall Enrollment Summary By School By Grade for School Year 2019-20."

In 2019-20, nearly three-quarters of the students at LHS were white (74 percent), and nearly one-fifth of students (18 percent) were Hispanic (Table 2). Just under one-fifth of students (19 percent) were eligible for free or reduced-price lunch. Twenty-one percent of students were classified as "at-risk" under the

³⁶ Calculation provided to the study team by the Wyoming Department of Education, based on analysis of combined wde684 student, wde684 section, and wde638 course data sets.

state funding model (that is, the unduplicated count of students eligible for free or reduced-price lunch, ELL students, or mobile students in grades 6-12).

Table 2. Laramie High School student characteristics: 2019-20

Student characteristic	Percentage of student population
Race/ethnicity	
American Indian/Alaska Native	2
Asian	2
Black	1
Hispanic	18
Pacific Islander	-
Two or more races	3
White	74
Eligible for free or reduced-price lunch	19
English language learner	2

- Data not reported to protect student confidentiality.

Source: Wyoming Department of Education, "School Level Fall Enrollment by Ethnicity and Gender," "USDA National Food Lunch Program and Local Free and Reduced Lunch Eligibility - School Level For 2019-20," and data provided to the study team by the Wyoming Legislative Service Office.

School Goals

Study participants shared that the school's overarching goal is for students to graduate and be successful after graduation. Recent school improvement plans reflect this goal by focusing on graduation as well as academic success. According to the 2019-20 LHS school improvement plan, school personnel sought to increase the school's Wyoming Accountability in Education Act (WAEA) School Performance Report extended graduation rate score from "meets target" to "exceeds target" (p. 1). The school improvement plan also lists a goal of increasing the WAEA School Performance Report growth indicator score from "meets target" to "exceeds target" (p. 5). During focus groups, study participants indicated that these academic goals exist alongside a goal that students adhere to high behavioral expectations. A staff member noted that adults throughout the school expected students to be safe, respectful, responsible, and kind.

School Culture

One study participant noted that the school culture has been "very positive" in recent years. Others echoed this sentiment, and study participants described a school culture marked by a strong administration. In fact, one study participant attributed the school's recent success to a change in building administration, and another study participant said they are "lucky and blessed" to have administrator support for school programming that serves special populations of students. Study participants pointed to administrators' clear expectations and focus on relationship-building as examples of positive building leadership. Indeed, comments about relationships and collaboration permeated discussions of school culture. Study participants said they work hard to try to understand and connect with students, and one study participant described positive relationships among students

themselves. Others indicated that increased collaboration among colleagues – both as a whole staff as well as within subject-specific professional learning communities (PLCs) – has led to positive shifts in school climate and has improved curriculum and instruction. Teachers reported that the staff is a team, and that teachers’ work in their PLCs is a major source of growth.

Student Performance

Between 2013-14 and 2018-19, the percentage of Laramie High School students who were at proficient or above on the state summative assessment increased 14 percentage points (Table 3). While LHS continues to work toward its student achievement goals, recent increases in summative assessment scores illustrate clear progress toward those objectives.

Table 3. Percent of Laramie High School students who scored at or above the proficient level on the state summative assessment: School years 2013-14 through 2018-19

Year	Percent of students at proficient or above
2013-14	48
2014-15	39
2015-16	48
2016-17	44
2017-18	49
2018-19	62

NOTE: Wyoming has changed its summative assessment in recent years and began giving the current test (the Wyoming Test of Proficiency and Progress, or WY-TOPP) in 2017-18. Accordingly, the data for these calculations come from different assessments over time (e.g., the formerly used Proficiency Assessments for Wyoming Students [PAWS] and the WY-TOPP). While changes in test administration make cross-year comparisons more difficult, using data from multiple assessments allows for review of scores over a longer time period.

SOURCE: Data provided to study team by the Wyoming Department of Education.

Data on graduation rates indicate a high overall graduation rate at LHS in 2018-19 (Table 4). Still, variation by student subgroup existed, such that some students’ graduation rates were lower than others. Notably, graduation rates for students who were eligible for free or reduced-price lunch (79 percent) lagged behind the overall rate (91 percent).

Table 4. Federal four-year graduation rates for Laramie High School, by student characteristics: 2018-19 cohort

Student characteristic	Graduation rate (%)
All students	91
English language learners	-
Gender	
Female	95
Male	88
Homeless students	-
Eligible for free or reduced-price lunch	79
Migrant students	-
Race/ethnicity	
American Indian	-
Asian	-
Black	-
Hispanic	92
Pacific Islander	-
Two or more races	-
White	90

- Data not reported to protect student confidentiality.

Note: A cohort year is a grouping of students expected to graduate on-time (4 years) at the end of the same school year (the cohort year, which in this table is 2018-19). The bulk of each cohort consists of all the Wyoming students entering 9th grade in the same year, which is then adjusted for students transferring in and out of state. The four-year graduation rate is the percentage of students in a cohort graduating in 4 or fewer years.

Source: Wyoming Department of Education, “Wyoming School Graduation Rates: Federal Graduation Rates for the 2018-19 Cohort.”

School Staff

According to the Wyoming Department of Education, the average school salary for a high school teacher in Albany County School District #1 in 2019-20 was \$59,983, which was lower than the statewide average salary for a high school teacher (\$64,893).³⁷

According to a study participant, the educators at LHS are a “talented team of teachers.” As shown in Table 5, 42 teachers instruct in a core subject area, including nine teachers for ELA, 10.5 FTEs for math teachers, nine science teachers, 8.5 social studies teachers, and five world language teachers. The school

³⁷ Data for Albany County School District #1 retrieved from the “All Staff by Category and District with Average Salaries” database found at <https://edu.wyoming.gov/data/statisticalreportseries-2/>. Data for Wyoming retrieved from “State Staff by Category with Average Salaries” at the same site.

employs 18.15 elective teachers: 10.65 who teach in the areas of art, music, and health/physical education, and an additional 7.5 who offer CTE courses in agriculture, business, health occupations, family and consumer science, and industrial arts.³⁸ Three special education teachers work in the personalized learning services (PLS) program, including one who works with adaptive physical education. Eight additional special education teachers work with students in the general program. One librarian works at the school, as does half of an FTE for a teacher for English as a second language (ESL). The school has no interventionists or gifted and talented teachers. The school's teachers receive support from one instructional facilitator. Several paraprofessionals work in the school, including one instructional paraprofessional for the music program, 13 paraprofessionals who work in the special education department, one library paraprofessional, and one paraprofessional who works in the learning support center room.

³⁸ Another industrial arts teacher works full-time in the LHS building, but this person is actually employed by Laramie County Community College.

Table 5. Laramie High School staffing levels, 2019-20

Category	FTE
<i>Licensed staff</i>	
Core teachers	42.00
Elective teachers	10.65
Career and technical education teachers	7.50
Instructional facilitator	1.00
Special education self-contained teachers (severe & profound)	3.00
Special education teachers	8.00
ESL teachers	0.50
Librarian	1.00
<i>Non-licensed staff</i>	
<i>Aides</i>	
Instructional paraprofessionals	1.00
Special education self-contained paraprofessionals (severe & profound)	7.00
Special education paraprofessionals	6.00
Supervisory paraprofessional	1.00
Library paraprofessional	1.00
<i>Administration</i>	
Principal	1.00
Assistant principals	3.00
Athletic director	1.00
Clerical	7.00
<i>Pupil Support</i>	
Counselor	4.00
Other pupil support	3.00
Nurse	1.50
School psychologist	2.00
Speech language pathologist	1.00
Campus monitor staff	2.00

Source: Conversations with Laramie High School staff.

The school's full-time principal works alongside three assistant principals (one for ninth grade, one for tenth and eleventh grades, and one for twelfth grade), as well as a fourth assistant principal who

coordinates athletics and activities (listed in the table above in the “athletic director” row). Seven clerical staff work in the office: one for attendance, two receptionists, one bookkeeper, one assistant to the principal, one assistant for athletics and activities, and one assistant for the counseling/guidance department.

Pupil support staff include four counselors, 1.5 FTEs for nurses, two school psychologists, and one speech language pathologist. The table above lists three additional pupil support personnel, which include a special education case manager, a person who provides counseling services for special education, and someone who helps students transition to the workforce.³⁹ The school has access to district-contracted occupational therapists if needed. LHS also has about 0.75 FTE for a school resource officer, whose compensation comes from funds outside of the school. Two additional staff are monitors – one monitors the in-school suspension program and the other monitors the campus generally.

School Schedule

The student day starts at 7:55 am and ends at 3:10 pm. Monday, Thursday, and Friday have seven class periods with each lasting about 50 to 55 minutes. Tuesdays and Wednesdays run on a block schedule, and Wednesdays also include an additional period for intervention and enrichment.

Approaches to Curriculum, Instruction, Intervention, and Assessment

Curriculum Development

During focus groups, LHS teachers described a shared and consistent approach to curriculum development. Across subject areas, teachers indicated that they have been working hard to develop guaranteed and viable curriculum (GVC), so that all class sections in the same course use the same textbooks, have the same assignments, and administer the same assessments. Additionally, teachers noted that they meet with colleagues across the district to align curriculum vertically, so that, for instance, middle and high school curriculum aligns. Curricular consistency is also present at a day-to-day level, as teachers of the same courses meet regularly in their PLCs to create lesson plans and identify the activities and materials that all teachers implement for the same unit.

Curricular Program

According to the Laramie High School 2020-21 curriculum guide, students must obtain 25 credits to graduate. These credits must include the following:

- Four credits of English
- Three credits of math
- Three credits of science
- Three credits of social studies
- Two credits in physical education and health (1.5 in physical education and 0.5 in health)

³⁹ The school has one additional workforce transition support specialist who works for a special education program called STEP. This person’s compensation comes from outside sources.

- Two credits of one of the following three content areas: career and technical education, fine arts, or world language.⁴⁰

LHS offers a variety of courses in each of these subject areas, including several Advanced Placement (AP) courses. In addition, many students take dual enrollment courses at nearby postsecondary institutions (i.e., the University of Wyoming or Laramie County Community College), particularly in ELA and math.

For this report, information on course curriculum comes both from focus groups with school staff and the ACSD1 curriculum manual.⁴¹ Core courses rely on a variety of materials. For example, for English 9, LHS teachers reported that they developed their own curriculum that focuses on reading, writing, and text analysis with American literature. They use teacher-chosen materials rather than a textbook. For English 10, they focus on reading and writing with respect to current events. Writing work in English 10 focuses mostly on nonfiction. Again, curriculum comes from teacher-chosen materials rather than a textbook.

Math teachers use College Prep Math (CPM) materials from sixth grade through algebra II – an example of the vertical alignment noted above in the section on curriculum development. ACSD1 materials also note the use of Big Ideas Math for algebra III.

Science teachers use a variety of materials for different courses. For example, teachers noted that they use Pearson textbooks for chemistry, which they selected due to their alignment to the Next Generation Science Standards (NGSS). They use *EarthComm: Project-Based Space and Earth Science* for earth science. ACSD1 materials also note the use of texts from Cengage, Houghton Mifflin Harcourt, Glencoe, and Edvantage.

Teachers base the social studies curriculum on the Wyoming state standards and the Common Core. Modern American studies courses rely in part on materials from the Teachers Curriculum Institute (TCI, a company that creates and publishes online curriculum for science and social studies), and they use materials from ICivics and We the People for government courses. ACSD1 materials also note the use of curriculum from the Bill of Rights Institute.

In world language, teachers use comprehension-based readers rather than textbooks. They avoid thematic units and instead focus on learning about the language, geography, culture, and history through the readers.

Curriculum outside of the core (i.e., in elective and CTE courses) follows Wyoming standards, national standards, and, particularly for CTE courses, the local industry needs as identified by area business leaders. Teachers in the PLS program use the Unique Learning curriculum, which focuses on content, life skills, and current events.

In sum, LHS teachers use a variety of curricular materials, including many materials selected at the district level to ensure alignment across school level (e.g., middle and high school). LHS teachers administer with these materials so that they are part of a GVC that is common across LHS courses.

⁴⁰ This requirement is a change for students in the class of 2022 and beyond. For students who are scheduled to graduate in 2021, their requirement is for one credit of vocational/fine arts.

⁴¹ The curriculum manual is available at <https://www.acsd1.org/acsd/wp-content/uploads/2017/08/Albany-County-School-District-Curriculum-Manual.pdf>.

Instructional Program

According to a study participant, in the past few years, teachers across the school have focused on what they term “high-leverage” practices (an example of which is providing feedback to students, a focus for the 2019-20 academic year). LHS teachers reported the use of a wide variety of additional instructional practices, including whole-group instruction, small group instruction, station work (e.g., creating stations in the room that students rotate through), lab work, writing assignments, and other project-based work. Instruction in world language is based on comprehensible input (CI) strategies as well as total physical response (TPR), a practice that includes the matching of movements with words or phrases. In the same way that LHS teachers focus on common curriculum, study participants indicated that teachers of common courses use common instructional strategies so that they create instructional consistency for students.

Interventions for Struggling Students

Academic Interventions

Interviews with school staff highlighted an intentional focus on academic interventions for students who continue to struggle after Tier 1 instruction. LHS offers multiple in-school and after-school intervention activities. The school also offers credit recovery in summer school.

In-school interventions include a variety of approaches, including a 90-minute flex time period on Wednesday called intervention and enrichment (I&E), during which time students receive additional support. The I&E period happens on Wednesdays and works on a pass system. Students can choose which teachers they need to see, and their homeroom teachers write them a pass. Students have the same homeroom teacher for all four years. In addition to the I&E period, LHS students have access to resources such as one-on-one conferencing in ELA courses, nontraditional or remedial classes, and a study hall period (over and above I&E) that any student can take. Students who have IEPs also have access to an additional academic intervention period during the school days, during which time they practice executive function activities and receive support to complete work from their other academic courses.

Multiple teachers described an “in-time remediation” approach that involves re-teaching during an afterschool program. According to a study participant, the school moved to this afterschool remediation approach about two years ago. Now, teachers in multiple subject areas (e.g., science, math) pay careful attention to scores on classroom exams to identify students who need the afterschool instructional support. Students who are struggling attend the afterschool remediation program two to three days per week.

Behavioral Interventions

According to study participants, administrators pay attention to students who have struggled behaviorally by tracking their attendance and behavior. LHS administrators also make a point to perform visits to their homes so that they can build positive relationships with families. Study participants indicated that they seek to establish relationships with parents to increase family involvement and to cultivate a partnership between school and home.

The school has a variety of interventions for students who are struggling behaviorally. One such program is a single point of entry program managed by Big Brothers Big Sisters, with partner organizations such as the county attorney’s office, counseling services, and the high school. Two administrators work

closely with this program. These organizations come together to serve youth who have come into contact with law enforcement or the criminal justice system in some way. These agencies strive to support the students and their families and offer services that lead to positive outcomes for students.

The school also participates in a program for students who are struggling with substance abuse. The Integrated Juvenile Treatment Program (IJTP, or “Drug Court,” informally) is a program that comes with accountability. One of the school’s administrators works closely with this program. This program seeks to provide students with the wrap-around resources they need, such as substance abuse treatment or other types of support. The group includes representatives from Big Brothers Big Sisters; the county attorney’s office; the Department of Family Services; and others. The group works to find resources that will help students achieve their goals, even if that means they need to pursue a GED or enroll in the alternative school.

Assessments

In focus groups, LHS teachers described many uses of assessment data, and one study participant deemed LHS teachers “good users of data.” While some focus group discussions highlighted the use of benchmark data (e.g., some teachers use interim WY-TOPP data to make more macro instructional decisions), much of the discussion around assessments focused on more fine-grained data. Teachers reported using these data to determine which topics to cover more deeply in class as well as to make decisions about student placement in interventions. Four years ago, LHS teachers determined which state standards were high-priority and deemed them “essential learning standards.” Focus group participants indicated that, across multiple subject areas, teachers of common courses developed common assessments for these essential learning standards. Across disciplines, teachers now consistently administer these common assessments to students in different class sections of the same course. Teachers in a variety of subject areas also reported a recent move toward increasing and improving the quality of feedback that students receive from teachers. This feedback can take a variety of forms (e.g., one-on-one conferencing, rubric-based teacher feedback on assignments, peer feedback).

Professional Development

Much of the professional development (PD) at LHS occurs through PLCs, which are organized into subject-specific areas within disciplines (e.g., an algebra I PLC as a subset of the wider math PLC). PLCs develop the curriculum, instruction, and assessment practices as described in the preceding sections, and they review student performance on the common assessments to make decisions about instruction and intervention. They also receive PD on the high-leverage practices that teachers in the school are expected to implement. PLCs meet at least once per week, and one study participant noted meeting more frequently: once per week for a data meeting and another time to lesson plan.

Other types of PD also exist for teachers at the school. For example, teachers learn about high-leverage practices (e.g., providing feedback to students) not only in PLCs but also during district PD days and through web-based videos that teachers watch. Teachers use Solution Tree to access other PD, such as PD on essential learnings and how to develop curriculum and assessments that tie to them. Further, study participants noted that the district makes resources available for them to attend external PD relevant to their subject areas (e.g., conferences) and for them to hold PD opportunities like book studies.

Summary and Alignment with the Evidence-Based Model

In recent years, Laramie High School has demonstrated increases in student performance. Specifically, between the 2013-14 and 2018-19 school years, the percentage of Laramie High School students who scored proficient or above on the state summative test increased 14 percentage points, up to 62 percent.⁴² This increase is likely the result of many factors, and this study is not designed to identify these specific factors. What this study does is illuminate the context in which these improvements occurred. According to LHS staff, school context is marked by strong administration, deep professional collaboration, implementation of GVCs that provide students common and vertically aligned curriculum and assessments, and multiple opportunities for both academic and behavioral support.

LHS staff engage in many strategies that undergird the Evidence-Based (EB) Model. In particular, they demonstrate the following:

- Participation in data-based decision making
- Implementation of PLCs, where teachers collaborate with each other on matters of curriculum, instruction, and assessments
- Providing multiple opportunities for intervention for struggling students
- Delivering common, vertically aligned curriculum across multiple subject areas.

LHS core and elective teacher counts differ from what would be generated under the EB Model and the Legislative Model. Specifically, LHS employs a total of 60.15 teachers (42.00 core, 10.65 elective, and 7.50 career and technical), whereas the EB Model would generate 55.24 teacher positions (41.43 core and 13.81 for electives, including CTE) and the Legislative Model would generate 66.76 positions (49.32 core, 16.28 elective, and an additional 1.16 for a small-class CTE adjustment). Thus, core teacher counts at LHS are similar to what would be generated under the EB Model, but LHS employs greater numbers of elective and CTE teachers than would be provided by the EB Model. LHS core teacher staffing is lower than what would be generated by the Legislative Model, but staffing for electives and CTE is slightly higher than Legislative Model levels.

⁴² Please note that the state summative test changed during this time period. See the note on Table 3 for additional information.

Lovell High School

A Case of an Improving School in Wyoming

Prepared for the Wyoming Legislature Select Committee on School Finance Recalibration

Kathleen Mulvaney Hoyer

Activate Research, Inc.

Partner to Picus Odden & Associates

December 1, 2020

Executive Summary

Lovell High School (LHS) is in Lovell, Wyoming and is the only high school in Big Horn County School District #2. In the 2019-20 school year, LHS enrolled 213 students. In that year, 88 percent of the students were white, 9 percent were Hispanic, and 39 percent were eligible for free or reduced-price lunch. Forty-two percent of students were classified as “at-risk” under the state funding model. Between the 2013-14 school year and the 2018-19 school year, LHS demonstrated a substantial increase in student achievement on the state’s summative test. Specifically, between those two years, the percentage of LHS students who scored at or above the proficient level increased 26 percentage points, from 42 to 68 percent. This study describes the context in which these improvements occurred and analyzes how, if at all, the school’s strategies and staffing align with the Evidence-Based (EB) Model.

Findings Related to School Context

Study participants described LHS as a “shining light” partially due to its extensive focus on providing students opportunities to connect with instructional staff in a mentorship capacity, advocate for their needs, and receive extra instructional support when they struggle to master standards. Teachers collaborate with their colleagues on matters of curriculum and instruction, and school staff indicated that they perceived both the instructional staff and school administration to be strong. Teachers use standards-based curriculum and, when possible, administer common assessments. Staff dig deeply into student data and use this information to make data-based decisions about how best to support students.

Alignment with the Evidence-Based Model

Investigations into how the school operates indicate areas of alignment and divergence with the EB Model. For example, many of the strategies LHS staff use align with the EB Model. These strategies include analyzing student performance data, embracing ambitious goals, focusing on curriculum and instruction, implementing collaborative professional development, and providing extra help for struggling students. However, LHS has 9.0 core teachers versus 8.4 that the EB Model would provide, and the school exceeds the number of elective teachers including both elective (art, music, physical education) and career and technical education teachers (5.51 at the school vs. 2.8 in the EB Model).

Introduction

This report is one of ten case studies of Wyoming schools that have improved or demonstrated consistently high student performance in recent years. Taken together, these case studies inform the recalibration of the Wyoming Education Resource Block Grant Model. Specifically, the studies provide information relevant to costing out the basket of goods and services to which Wyoming students are constitutionally entitled. The studies offer insights on how the selected schools have leveraged their resources to foster large improvements in or high levels of student performance. The following sections of this report describe the school's context, student performance, staff, school schedule, approaches to teaching and learning, and professional development. The report draws upon information from two main sources: (1) a review of documents provided by school officials or available online and (2) individual and focus group interviews held virtually via Zoom with 19 members of the school staff that occurred in May 2020.

School Context

Lovell High School (LHS) is in Lovell, Wyoming – a small town in north central Wyoming with nearly 2,400 residents according to recent Census data. It is situated in the Bighorn Basin, just west of the Bighorn Mountains, just south of the Pryor Mountains, and about 90 miles east of Yellowstone National Park. Local industries include agriculture, healthcare, and manufacturing (i.e., bentonite and gypsum processing plants as well as a sugar factory). According to a study participant, many residents of Lovell are members of the Church of Jesus Christ of Latter-Day Saints, which is relevant to school operations given that many students at the school participate in religious education during release time (discussed in more detail in the section on the school schedule).

LHS is the only high school in Big Horn School District #2. The percentage of students who are eligible for free or reduced-price lunch has increased in the past few years, and the school recently became a Title I school. According to a study participant, students at the school enjoy sports, value agriculture (as indicated by the popularity of the FFA club), and enjoy hands-on vocational courses (as indicated by study participants who called career and technical courses a “motivator” for student attendance). While enrollment at the school has been relatively steady in recent years, a member of the school staff noted that the school is a “shining light” that attracts out-of-boundary families seeking to enroll their children in the school's dual/concurrent enrollment courses or to receive the school's interventions for struggling learners and special needs students. When possible given available resources, the school tries to accept transfers and offer students necessary supports to achieve success.

Student Demographics

According to data from the Wyoming Department of Education, LHS enrolled 213 students in 2019-20 (Table 1). According to information from the Wyoming Department of Education, the average English language arts (ELA) and math class size in 2019-20 was 17.07 students.⁴³

⁴³ Calculation provided to the study team by the Wyoming Department of Education, based on analysis of combined wde684 student, wde684 section, and wde638 course data sets.

Table 1. Lovell High School student enrollment: 2019-20

Grade level	Enrollment
9	78
10	42
11	59
12	34
Total	213

Source: Wyoming Department of Education, "Fall Enrollment Summary By School By Grade for School Year 2019-20."

In 2019-20, most students at the school were white (88 percent), followed by Hispanic (9 percent). Thirty-nine percent of students were eligible for free or reduced-price lunch (Table 2). Forty-two percent of students were classified as "at-risk" under the state funding model (that is, the unduplicated count of students eligible for free or reduced-price lunch, English language learner [ELL] students, or mobile students in grades 6-12).

Table 2. Lovell High School student characteristics: 2019-20

Student characteristic	Percentage of student population
Race/ethnicity	
American Indian/Alaska Native	-
Asian	-
Black	-
Hispanic	9
Pacific Islander	-
Two or more races	-
White	88
Eligible for free or reduced-price lunch	39
English language learner	-

- Data not reported to protect student confidentiality.

Note: Detail may not sum to total due to rounding.

Source: Wyoming Department of Education, "School Level Fall Enrollment by Ethnicity and Gender," "USDA National Food Lunch Program and Local Free and Reduced Lunch Eligibility - School Level For 2019-20," and data provided to the study team by the Wyoming Legislative Service Office.

School Goals

School personnel noted that they have high expectations for all students, and study participants offered several examples of goals related to these high expectations. For example, one participant shared that "a huge goal" for the school is to attain a 100 percent graduation rate. Another participant noted a goal for all students to perform at grade level and reported that the LHS staff "pursues [proficiency] relentlessly." A third indicated a goal for students' ACT scores to be at least 22. The school also has goals related to student proficiency in reading and math: according to the 2019-20 LHS school improvement plan, "Lovell High School will meet or exceed [Wyoming Accountability in Education Act (WAEA)] growth

expectations for ninth through eleventh grade students” (p. 2). All teachers throughout the school, regardless of subject area, are involved in the school goal-setting process, which includes looking at data both overall and at the student level.

While LHS staff highlighted the importance of academic goals, they also prioritize other outcomes for students. In the words of one participant, test scores are not the only important measure and the school takes a “well-rounded approach” to student development. LHS staff are “really concerned about the whole kid,” and an overriding goal at LHS is to build positive relationships with students.

School Culture

Study participants described a school culture with high-quality staff throughout the building – from administration to instructional staff. For example, teachers noted the presence of strong leadership at LHS, both with respect to the principalship and other building leadership. In the words of one study participant, the building administrator is “a really good principal” who prioritizes “shared leadership.” The principal has cultivated a strong staff and has created a culture marked by high expectations, respect, and support. LHS also has a building leadership team, which serves a dual purpose: to reduce “housekeeping” issues from teachers’ workloads and to serve as an advisory committee for school decisions.

Comments from study participants also indicated a strong instructional staff. Teachers noted a “community among staff,” where peer-to-peer collaboration is commonplace. According to focus group participants, the school has “quality teachers” who always seek to improve and want to do better in one year than they did the last. An example of such desire for continuous improvement came from one teacher who indicated that teachers appreciate actionable feedback for improvement offered by the administration.

Student Performance

Between the 2013-14 school year and the 2018-19 school year, the percentage of LHS students at or above proficient on the state summative assessment increased by 26 percentage points (Table 3), from 42 to 68 percent at or above proficiency. This increase has helped the school make progress toward its goals for high student achievement.

Table 3. Percent of Lovell High School students who scored at or above the proficient level on the state summative assessment: School years 2013-14 through 2018-19

Year	Percent of students at proficient or above
2013-14	42
2014-15	43
2015-16	42
2016-17	33
2017-18	63
2018-19	68

Note: Wyoming has changed its summative assessment in recent years and began giving the current test (the Wyoming Test of Proficiency and Progress, or WY-TOPP) in 2017-18. Accordingly, the data for these calculations come from different assessments over time (e.g., the formerly used Proficiency Assessments for Wyoming Students [PAWS] and the WY-TOPP). While changes in test administration make cross-year comparisons more difficult, using data from multiple assessments allows for review of scores over a longer time period.

Source: Data provided to study team by the Wyoming Department of Education.

In 2018-19, the LHS graduation rate was 96 percent for all students and was consistently high across student subgroups (Table 4).

Table 4. Federal four-year graduation rates for Lovell High School, by student characteristics: 2018-19 cohort

Student characteristic	Graduation rate (%)
All students	96
English language learners	-
Gender	
Female	100
Male	92
Homeless students	-
Eligible for free or reduced-price lunch	93
Migrant students	-
Race/ethnicity	
American Indian	-
Asian	-
Black	-
Hispanic	-
Pacific Islander	-
Two or more races	-
White	95

- Data not reported to protect student confidentiality.

Note: A cohort year is a grouping of students expected to graduate on-time (4 years) at the end of the same school year (the cohort year, which in this table is 2018-19). The bulk of each cohort consists of all the Wyoming students entering 9th grade in the same year, which is then adjusted for students transferring in and out of state. The four-year graduation rate is the percentage of students in a cohort graduating in 4 or fewer years.

Source: Wyoming Department of Education, "Wyoming School Graduation Rates: Federal Graduation Rates for the 2018-19 Cohort."

School Staff

According to data from the Wyoming Department of Education, the average salary for a high school teacher in Big Horn School District #2 in 2019-20 was \$63,338, which was slightly lower than average salaries for high school teachers across the state (\$64,893).⁴⁴

⁴⁴ Data for Big Horn School District #2 retrieved from the "All Staff by Category and District with Average Salaries" database found at <https://edu.wyoming.gov/data/statisticalreportseries-2/>. Data for Wyoming retrieved from "State Staff by Category with Average Salaries" at the same site.

Table 5. Lovell High School staffing levels, 2019-20

Category	FTE
<i>Licensed staff</i>	
Core teachers	9.00
Elective teachers	2.63
Career and technical education teachers	2.88
Special education teachers	2.00
Tutors/Tier 2 interventionists	0.63
Librarian	0.31
<i>Non-licensed staff</i>	
<i>Aides</i>	
Instructional paraprofessionals	1.13
Special education paraprofessionals	3.63
Library paraprofessionals	0.63
<i>Administration</i>	
Principal	1.00
Athletic director	0.25
Clerical	1.00
<i>Pupil Support</i>	
Counselor	1.00
Nurse	0.30
Perkins/job shadow coordinator	0.38
Multi-tiered system of support (MTSS) coordinator	0.31
School resource officer	1.00

Source: Conversations with school staff.

As shown in Table 5, LHS employs 9 core teachers: two ELA teachers, two and a quarter FTEs for math teachers, two FTEs for science, almost two FTEs for social studies, and nearly a full FTE for Spanish. The school has 5.51 FTEs for electives and career and technical education (CTE): 2.63 of these are for electives (for physical education, art, music, and health)⁴⁵ and just under 3 FTEs are for CTE (for multimedia studies, food and consumer science, agriculture, and other vocational education). Two teachers work part-time as interventionists alongside other instructional roles, for a combined FTE of about 0.63, and the school has part of a librarian's time (at a level of about one-third of an FTE). Two teachers work with students with special needs. Title I funds support instructional paraprofessionals who work at about 1.13 of an FTE, and the school's staff includes paraprofessionals for special education (3.63 FTE) as well as part-time support from a library paraprofessional. LHS has no instructional

⁴⁵ Please note that while these teachers are classified as "elective" under the EB Model, some of these teachers are teaching required courses, as the school requires 0.5 credits in general physical education and 0.5 credits in health for graduation.

facilitators,⁴⁶ no English as a second language (ESL) teacher, and no teacher for gifted and talented students.

School administration includes a full-time principal, a part-time athletic director who works for both the high school and the middle school, and one clerical staff member. Several personnel work in pupil support positions. LHS has one counselor and one third of a nurse's time. Staff members who coordinate a job shadowing program and the multi-tiered system of support (MTSS) programs also provide pupil support services to LHS. One school resource officer, whose compensation comes mostly from school funds but is supplemented by law enforcement agency funds, works at the school. While a study participant noted that LHS has employed a school psychologist in the past, the school had no on-site school psychologist in 2019-20 but rather contracted on an as-needed basis for these services (not shown in table). LHS has three custodians and 1.5 food service workers (not shown in table).

School Schedule

LHS operates on a five-day week with four longer days and a short day for students on Fridays, after which time teachers meet in collaborative teams. Specifically, on Mondays through Thursdays, students are in school from 8:00 am to 3:24 pm. On Fridays, they are in class from 8:00 am to 12:45 pm; teachers then meet until 3:15 pm. LHS operates on an eight-period schedule. On Mondays through Thursdays, courses occur on a rotating schedule such that six of eight courses meet each day: three classes, lunch, then three more classes. On Fridays, all eight periods meet for a shortened duration: six classes, lunch, two classes. Teachers reported that they see students in each of their courses four times a week for a total of about 3.5 hours of instructional time. According to school staff, the eight-period, six-course rotating schedule allows for (a) a flex period every day wherein students have access to individualized support from teachers and (b) an extra class period where students can receive additional targeted intervention period for deeper Tier 2 assistance or attend religious education during release time.

Approaches to Curriculum, Instruction, Intervention, and Assessment

Curricular Program

According to the 2019-20 Lovell High School handbook, students must take the following credits to graduate:

- Four credits in English
- Three credits in math
- Three credits in science
- Three credits in social studies
- One half of a credit in health
- One half of a credit in physical education
- One credit in fine and performing arts
- One credit in career and technical education.

⁴⁶ In prior years, the school did have a building-level instructional facilitator, but that position was lost due to budget cuts. During the study year, teachers at Lovell High School had access to support from a district-level curriculum director, who performed some but not all of the roles that an instructional facilitator might (e.g., this person assisted with curriculum, assessment, and proficiency scales but did not observe in teachers' classrooms or engage in coaching).

Across the school, teachers reported using varied curricular materials. Study participants noted that when they make choices about curriculum, they are careful to align with standards – particularly essential learning standards – and assessments (i.e., the ACT and the WY-TOPP). For example, ELA teachers use materials from the Pearson Common Core literature series, novels, and teacher-created lessons on matters such as current events. Math teachers use a Glencoe textbook and supplement with materials from Khan Academy and other online sources (e.g., YouTube). Different science courses rely on materials from different sources, including National Geographic, Discovery Education, McDougal, Nowicki biology texts, and other supplements as needed. Social studies courses use materials from the Teachers Curriculum Institute, a Houghton Mifflin Harcourt world history book, and Interact. The Spanish teacher uses materials from Teachers Discovery. Special education teachers use Read180 and IXL and a teacher-developed, age appropriate curriculum for the life skills program.

Instructional Program

LHS teachers reported using many different instructional strategies. Those who discussed the use of lecture or whole-group instruction deemed the strategies more interactive than traditional direct instruction techniques. Other instructional strategies included gradual release of responsibility, collaborative learning, and exploratory learning. LHS is 1:1 with iPads, and teachers in multiple subject areas reported the use of instructional technology or online applications for both in-class instruction as well as instruction outside of the school day (e.g., as part of homework), though the degree of integration of this technology into instruction varies. For example, some use the online platforms of Quizlet, Socrative, or Kahoot for quick check-ins of student understanding. Others noted that they posted videos to Canvas for several types of instructional goals (e.g., for students to preview or review course topics or as parts of assignments or remediation opportunities).

Interventions for Struggling Students

LHS offers a wealth of academic interventions for struggling students, and, according to study participants, these opportunities are vital to the school's operation, attractiveness, and success. Key school-wide intervention activities include a flex period and targeted instruction. These interventions exist alongside several other chances for students to receive additional instruction, including "lab classes," afterschool tutoring, and an intensive summer school.

Flex period is a thirty-minute period at the end of every day. Students' flex period teachers remain constant across all four years at LHS so that every student has a consistent mentor and advocate while at LHS. Flex teachers review students' academic data to keep informed of their students' progress and work with students (and, if needed, parents) to ensure that students' progress is appropriate and that students receive the supports they need to achieve success. Flex period also includes character education and opportunities for student-driven intervention. That is, students have the opportunity to choose which teachers they need to visit in order to receive assistance. The mentoring aspect and student-driven focus of flex period time are intentional, as the school recently realized a deficiency in opportunities for student advocacy and developed the flex period to address that gap.

For the past two years, LHS has offered targeted instruction (TI) during one of the eight rotating one-hour periods in the school schedule. During this period, all students are assigned either to a tutoring class or an elective class, as the school does not schedule courses in ELA, math, science, or social studies

during this time. When students do not need additional support in one of these core courses, they attend the tutoring or elective class. If, however, they are struggling in a core course, they attend TI. Unlike the flex period, TI is teacher-driven, as the core teachers select students for participation in TI activities based on the results of recent assessments or assignments as well as course attendance.

Other opportunities exist on an as-needed basis. “Lab classes” are ELA and math intervention courses designed to keep students on grade level and to fill in gaps that hinder students’ proficiency on their grade-level standards. Students take these intervention courses alongside their traditional ELA or math courses. Before- and afterschool tutoring exists thanks to a 21st Century Community Learning Center grant, and students can use this time to study, make up assignments, or retake tests. LHS also runs an intensive summer school program for students who are not yet at grade level. According to a study participant, summer school students are “not done until they get to grade level.”

Assessments

LHS staff prioritize the use of data to inform key school activities (i.e., goal setting, decisions about curriculum, instruction, and interventions). For example, the whole school monitors WY-TOPP data to develop school improvement goals, and they spend two full in-service days looking at their students’ ACT scores. After examining pre-ACT scores to establish a baseline, they identify areas of student improvement and decline. While such a fine-grained review is “tedious,” a study participant noted it comes with “a payoff” with respect to improvements in student outcomes.

LHS teachers use several types of assessment data beyond these summative measures. For instance, math teachers use data from WY-TOPP modular assessments, and teachers in multiple subject areas reported the use of ACT Aspire data. Additionally, teachers at the school indicated that they focus attention on administering high-quality unit assessments. Math teachers currently give department-created common assessments, and science teachers are working to develop assessments with leveled questions that align with science essential learning standards scales and scoring guides. Across the school, LHS teachers reported the use of several formative assessment practices, including observations of student work, whiteboard work, practice tests, and quizzes such as those through Quizlet, Socrative, or Kahoot (as noted above in the section on instruction).

Professional Development

Professional development (PD) at LHS primarily takes place through collaborative professional learning communities (PLCs). LHS began to implement PLCs formally in 2015, but teachers reported that they had been engaging in collaborative strategies in informal ways prior to the adoption of PLCs. Content-based PLCs meet each Friday after student dismissal (see the section on school schedule for more on the student and teacher workdays). PLCs meet to design lesson plans, discuss curriculum, evaluate assessment integrity, standardize essential learning standards, and work with special education colleagues to plan for co-teaching.

LHS educators also receive other forms of PD. For example, each week before PLC meetings, the entire staff meets. While some Friday meetings may deal with administrative details on school operation, others include PD for teachers, such as book studies. LHS teachers also attend national conferences and share content with their colleagues when they return. Study participants indicated a wide range of PD including training through Solution Tree as well as training on the use of data for instruction, Character Counts, Harry Wong relationship-building strategies, and Marzano instructional strategies.

Summary and Alignment with the Evidence-Based Model

In recent years, student performance at Lovell High School has improved. Specifically, the percentage of LHS students who scored at or above proficiency on the state summative assessment increased 26 percentage points (from 42 to 68 percent) between the 2013-14 and 2018-19 school years.⁴⁷ Several factors have likely influenced this increase, and this study is not designed to identify the specific strategies related to specific increases. What this study does is illuminate the context in which these improvements occurred: a school where staff perceive both administration and teachers to be high-quality, where teachers deliver instruction using standards-based curriculum, and where intervention and student advocacy receive extensive attention.

Investigations into how the school operates indicate areas of alignment and divergence with the Evidence-Based (EB) Model. For example, many of the strategies LHS staff use align with the EB Model. These strategies include the following activities:

- Analyzing student performance data (here, investing significant time in drilling into students' WY-TOPP and ACT scores)
- Embracing ambitious goals (here, aiming for a 100 percent graduation rate)
- Implementing collaborative professional development (here, through professional learning communities)
- Providing extra help for struggling students (here, offering whole-school opportunities through the flex and TI periods as well as offering targeted offerings for students who need extra assistance).

Core and elective teacher staffing levels, though, diverge slightly from what the EB Model would recommend. Specifically, 14.51 teachers work at LHS (9.00 core, 2.63 elective, and 2.88 CTE). This is higher than what would be generated under the EB Model (11.2 teachers, where 8.4 are allocated for core and 2.8 are allocated for electives and CTE) and under the state's Legislative Model (13.7 teachers, where 10 are allocated for core, 3.3 are allocated for electives, and 0.4 are allocated to reduce class sizes in CTE courses).

⁴⁷ Please note that the state summative test changed during this time period. See the note on Table 3 for additional information.

Natrona County High School A Case of an Improving School in Wyoming

Prepared for the Wyoming Legislature Select Committee on School Finance Recalibration

Kathleen Mulvaney Hoyer

Activate Research, Inc.

Partner to Picus Odden & Associates

December 1, 2020

Executive Summary

Natrona County High School (NCHS) is located in Casper, Wyoming, the second-largest city in Wyoming. NCHS is part of Natrona County School District #1 and is one of four schools in the district that educates high schoolers. NCHS enrolled 1,737 students in the 2019-20 school year. In that year, over 80 percent of NCHS students were white, 12 percent were Hispanic, 36 percent were eligible for free or reduced-price lunch, and 38 percent were classified as “at-risk” under the state funding model. Between the 2013-14 and 2018-19 school years, the percentage of NCHS students who were at proficient or above on the state summative assessment increased 22 percentage points, from a low of about one third of students at or above proficient to just over half of students at or above proficient (specifically, 33 to 55 percent). This study describes the context in which these improvements occurred and analyzes how, if at all, the school’s strategies and staffing align with the Evidence-Based (EB) Model.

Findings Related to School Context

Study participants depicted NCHS as a school with deep roots in the community and a culture of school pride. In the words of one NCHS educator, “Every day is a great day to be a Mustang.” Teachers at the school described the building leadership as strong, and they reported consistent, sustained collaboration with each other through subject-area professional learning communities (PLCs). During PLCs, teachers plan for multiple aspects of instruction and they review student performance data from common assessments. NCHS students have access to special academic programs (e.g., a ninth-grade house system, an International Baccalaureate program, and access to a campus with high-end career and technical education courses). NCHS also offers multiple intervention opportunities for students, both within and outside of the school day and year.

Alignment with the Evidence-Based Model

NCHS staff engage in many strategies that align with the EB Model. Specifically, they analyze student performance data, implement professional development through the use of PLCs, provide a multitude of supports for struggling students, and have strong building leadership for data-based decision making. Core and elective teacher staffing, however, is different at NCHS than what would be provided under the EB Model. Specifically, NCHS employs fewer numbers of core teachers but greater numbers of elective teachers than would be provided under the EB Model.

Introduction

This report is one of ten case studies of Wyoming schools that have improved or demonstrated consistently high student performance in recent years. Taken together, these case studies inform the recalibration of the Wyoming Education Resource Block Grant Model. Specifically, the studies provide information relevant to costing out the basket of goods and services to which Wyoming students are constitutionally entitled. The studies offer insights into how the selected schools have leveraged their resources to foster large improvements in or high levels of student performance. The following sections of this report describe the school's context, student performance, staff, school schedule, approaches to teaching and learning, and professional development. The report draws upon information from two main sources: (1) a review of documents provided by school officials or available online and (2) individual and focus group interviews held virtually via Zoom with 22 members of the school staff that occurred in May 2020.

School Context

Natrona County High School (NCHS) is located in Casper, Wyoming, which is the second-largest city in Wyoming (with almost 58,000 people, per recent Census data). The city is home to Casper College as well as a large hospital that draws visitors who are seeking medical care from across the state. Major industries include natural resource extraction (e.g., oil, gas, and coal), ranching and farming, and tourism. Parents of students at the school work in a variety of industries, including the natural resource, healthcare, education, and service industries. Outdoor activities – including hiking, snowmobiling, and fishing – are important parts of life in the area.

NCHS is part of Natrona County School District #1, which uses an open enrollment process. It is one of four schools in the district that educates high schoolers. Two of these schools (including NCHS) are large high schools located in Casper, one is a small rural high school, and one is a small K-12 school. The district also operates a career and technical education (CTE) campus called Pathways Innovation Center (PIC), which offers a variety of vocational and CTE courses to any high school student in the district. NCHS is housed in an historic building that recently underwent an extensive renovation. In the words of one study participant, NCHS is on a “dream campus.” Members of both the teaching staff and student body belong to families with several generations of NCHS graduates, and study participants noted a perceived sense of tradition and community pride in the school.

Student Demographics

According to the Wyoming Department of Education, NCHS enrolled 1,737 students in 2019-20 (Table 1). According to information from the Wyoming Department of Education, the average English language arts (ELA) and math class size in 2019-20 was 21.06 students.⁴⁸

⁴⁸ Calculation provided to the study team by the Wyoming Department of Education, based on analysis of combined wde684 student, wde684 section, and wde638 course data sets.

Table 1. Natrona County High School student enrollment: 2019-20

Grade level	Enrollment
9	517
10	422
11	410
12	388
Total	1,737

Source: Wyoming Department of Education, "Fall Enrollment Summary By School By Grade for School Year 2019-20."

In 2019-20, over 80 percent of NCHS students were white and 12 percent were Hispanic (Table 2). Thirty-six percent of students were eligible for free or reduced-price lunch, and 38 percent of students were classified as "at-risk" under the state funding model (that is, the unduplicated count of students eligible for free or reduced-price lunch, English language learner [ELL] students, or mobile students in grades 6-12).

Table 2. Natrona County High School student characteristics: 2019-20

Student characteristic	Percentage of student population
Race/ethnicity	
American Indian/Alaska Native	1
Asian	-
Black	1
Hispanic	12
Pacific Islander	-
Two or more races	3
White	82
Eligible for free or reduced-price lunch	36
English language learner	1

- Data not reported to protect student confidentiality.

Note: Detail may not sum to total due to rounding.

Source: Wyoming Department of Education, "School Level Fall Enrollment by Ethnicity and Gender," "USDA National Food Lunch Program and Local Free and Reduced Lunch Eligibility - School Level For 2019-20," and data provided to the study team by the Wyoming Legislative Service Office.

School Goals

NCHS educators indicated that they strive for continuous improvement, and student performance goals exist at all levels of the system, from the district, to the school, to each course. Study participants indicated that the school goals – as well as progress toward achieving the goals – are well known to both teachers and students. Throughout the year, school administrators hold assemblies and distribute handouts to outline the goals, and school staff hang posters that detail progress toward those goals in hallways and classrooms. Recently, in an effort to increase test scores, the school began to offer incentives for students to take the assessments more seriously. Study participants indicated a perception that the incentives are working and that, as a result, test scores are increasing.

According to a passage from the 2019-20 Natrona County High School student handbook, the school has the following student achievement goals. “Goal #1- By 2024, NCHS will increase the number of students in grades 9-11 scoring at the proficient or advanced level in language arts as measured by the statewide assessments (WY-TOPP & ACT) from present levels by at least 1 percentage point annually. Goal #2- By 2024, NCHS will increase the number of students in grades 9-11 scoring at the proficient or advanced level in math as measured by the statewide assessments (WY-TOPP & ACT) from present levels by at least 1 percentage point annually. Goal #3- By 2024, NCHS will improve its graduation rate to 86% as measured by the Federal four (4) year on-time graduation rate” (p. 6). Study participants extended the conversation around the goals by noting that school staff endeavor to exceed these goals and want to foster high achievement (whether it be through test scores or graduation) for all students.

NCHS also has behavioral goals. Staff reported that teachers at the school focus on “keeping kids in the classroom and keeping them learning.” The school uses a ticket system to reinforce positive behavior, wherein staff members give students raffle tickets for positive behaviors and draw for prizes at the end-of-the-year pride and excellence ceremony. The school has also been focusing attention on instilling character traits such as respect, responsibility, and integrity. Emphasis on behavior and the “safe and healthy environments” that accompany positive behavior is also present in the goals listed in the student handbook, which notes a fourth goal related to “safe and healthy environments.”

School Culture

Staff members described a culture at NCHS that is marked by strong building leadership, a dedicated teaching staff, and school pride. Specifically, study participants said that the principal’s leadership has improved school culture. In the words of one participant, “The culture has shifted and it has trickled down to the kids.” NCHS staff members described the teachers as “incredible,” “hard workers” who value genuine collaboration and whose “professionalism” leads to a “productive environment” for students and staff. Teachers described a “sense of community and pride” in the school’s building and traditions. In the words of one participant, NCHS is a “beautiful building with amazing people,” and another added that “every day is a great day to be a Mustang.” Staff members indicated that the school feels like a family despite its large size.

Student Performance

Between the 2013-14 and 2018-19 school years, the percentage of NCHS students who were at proficient or above on the state summative assessment increased 22 percentage points – with much of the improvement becoming evident in the most recent two academic years (Table 3). While NCHS continues to work toward its student achievement goals, recent increases in summative assessment scores illustrate clear progress toward those objectives, especially in the past two years.

Table 3. Percent of Natrona County High School students who scored at or above the proficient level on the state summative assessment: School years 2013-14 through 2018-19

Year	Percent of students at proficient or above
2013-14	33
2014-15	35
2015-16	34
2016-17	27
2017-18	44
2018-19	55

Note: Wyoming has changed its summative assessment in recent years and began giving the current test (the Wyoming Test of Proficiency and Progress, or WY-TOPP) in 2017-18. Accordingly, the data for these calculations come from different assessments over time (e.g., the formerly used Proficiency Assessments for Wyoming Students [PAWS] and the WY-TOPP). While changes in test administration make cross-year comparisons more difficult, using data from multiple assessments allows for review of scores over a longer time period.

Source: Data provided to study team by the Wyoming Department of Education.

In 2018-19, 82 percent of NCHS students graduated (Table 4). Still, variation by student subgroup existed, such that some students' graduation rates were lower than others.

Table 4. Federal four-year graduation rates for Natrona County High School, by student characteristics: 2018-19 cohort

Student characteristic	Graduation rate (%)
All students	82
English language learners	-
Gender	
Female	86
Male	78
Homeless students	-
Eligible for free or reduced-price lunch	75
Migrant students	-
Race/ethnicity	
American Indian	-
Asian	-
Black	-
Hispanic	71
Pacific Islander	-
Two or more races	-
White	83

- Data not reported to protect student confidentiality.

Note: A cohort year is a grouping of students expected to graduate on-time (4 years) at the end of the same school year (the cohort year, which in this table, is 2018-19). The bulk of each cohort consists of all the Wyoming students entering 9th grade in the same year, which is then adjusted for students transferring in and out of state. The four-year graduation rate is the percentage of students in a cohort graduating in 4 or fewer years.

Source: Wyoming Department of Education, "Wyoming School Graduation Rates: Federal Graduation Rates for the 2018-19 Cohort."

School Staff

According to the Wyoming Department of Education, the average school salary for a high school teacher in Natrona County School District #1 in 2019-20 was \$64,312, which was similar to the statewide average salary for a high school teacher (\$64,893).⁴⁹

⁴⁹ Data for Natrona County School District #1 retrieved from the "All Staff by Category and District with Average Salaries" database found at <https://edu.wyoming.gov/data/statisticalreportseries-2/>. Data for Wyoming retrieved from "State Staff by Category with Average Salaries" at the same site.

In 2019-20, NCHS employed 55.3 core teachers: 15 ELA teachers, 12 math teachers, 12 science teachers, 12.3 social studies teachers, and 4 foreign language teachers (Table 5). The school had 36.6 FTEs in electives, and career and technical education (CTE); specifically, NCHS employed 22.3 elective teachers in the areas of fine arts (4 FTEs), performing arts (4 FTEs), physical education (11 FTEs), the Reserve Officer Training Corps (2 FTEs), and driver's education (1.3 FTEs). NCHS had 14.3 FTEs for CTE in the areas of industrial technology, family and consumer science, and business.⁵⁰ A total of 18.3 special educators worked in the building, 4 of whom worked with students with severe special needs. Three interventionists (one tutor/interventionist and two credit recovery teachers), one librarian, and one English as a second language (ESL) teacher worked in the school. Several paraprofessionals supported these teachers: 3 paraprofessionals assisted with interventions, 28 paraprofessionals worked with students with special needs (including those with severe special needs as well as those with less severe needs), 2 paraprofessionals worked in the library, and 3 paraprofessionals served as supervisory aides. The school had no instructional facilitators and no gifted and talented teachers.

NCHS had a full-time principal who was supported by 3.5 assistant principals, and the school had access to 0.5 of an FTE for an athletic director. Seven clerical staffers supported the administration. Many pupil support personnel worked in the building, including 5.5 counselors, 2 nurses, 1.6 social workers, 2 psychologists, just under an FTE of specialists for therapy services (approximately half of an FTE for a speech language pathologist and 0.2 FTE for occupational and physical therapists), and someone who coordinated students' work experience programs. NCHS had 2.5 FTEs of campus supervisors, who monitor the building and grounds to free teachers from supervisory duties. The school regularly had access to one FTE of support from a school resource officer, who had additional support as needed from other officers.

⁵⁰ Natrona County School District #1 operates the PIC campus, which offers high-end CTE courses to any Natrona County high school student. Because NCHS students have access to courses from CTE teachers at the PIC campus, the number of CTE teachers at NCHS may be lower than it would be if the PIC campus were not available to NCHS students.

Table 5. Staffing at Natrona County High School, 2019-20

Category	FTE
<i>Licensed staff</i>	
Core teachers	55.3
Elective teachers	22.3
Career and technical education teachers	14.3
Special education self-contained (severe & profound) teachers	4.0
Special education teachers	14.3
ESL teachers	1.0
Tutors/Tier 2 interventionists	3.0
Librarian	1.0
<i>Non-licensed staff</i>	
<i>Aides</i>	
Instructional paraprofessionals	3.0
Special education paraprofessionals	28.0
Supervisory aides	3.0
Library paraprofessionals	2.0
<i>Administration</i>	
Principal	1.0
Assistant principal	3.5
Athletic director	0.5
Clerical	7.0
<i>Pupil support</i>	
Counselor	5.5
Nurse	2.0
Social worker	1.6
Psychologist	2.0
Occupational, physical, and speech language therapists	0.7
Work experience supervisor	1.0
Campus supervisors	2.5
School resource officer	1.0

Source: Conversations with school staff.

School Schedule

NCHS operates on a five-day school week, where the student day runs from 8:20 am to 3:24 pm, with teachers starting at 7:20 am. NCHS runs on a block schedule with a two-day rotation, where Mondays through Thursdays use block scheduling. On Fridays, students take all eight courses during shorter periods.

Approaches to Curriculum, Instruction, Intervention, and Assessment

Curricular Program

According to the 2019-20 Natrona County high school course catalog, students need to obtain the following credits to graduate:

- Four credits in ELA
- Three credits in math
- Three credits in science
- Three credits in social studies
- Two credits in physical education
- One credit in financial literacy/civic responsibility
- Ten and a half credits in electives (including the subjects listed above as well as fine and performing arts, foreign language, health, and vocational education).

NCHS students have access to a variety of opportunities for fulfilling these requirements. For example, in addition to courses offered at the NCHS campus, students have access to the PIC campus, where they can take several CTE courses in the areas of agriculture, food, and natural resources; architecture and construction; arts, audio/visual technology, and communication; hospitality and tourism; health science; information technology; manufacturing; and transportation, distribution, and logistics.⁵¹ NCHS also has an International Baccalaureate (IB) program, where NCHS students can choose to enroll in either the entire program (leading to an IB diploma) or to take specific IB courses alongside a more traditional high school program.

Curricular Materials

Study participants indicated that Natrona County School District #1 is on a seven-year curriculum adoption cycle. According to NCHS educators, the district reviews potential materials and winnows these down for inclusion on a list of approved curricular choices. Individual schools, then, choose which materials to use in their buildings.

The most recent ELA materials adoption process occurred approximately three to four years ago. NCHS ELA teachers currently use the StudySync curriculum for all four grades. According to a study participant, this program includes workbooks as well as a strong digital component. Teachers supplement the StudySync materials with additional resources, including the Wyoming library database (gowlyd.net), textbooks, and specific pieces of literature (e.g., novels, plays). Supplemental materials like novels are not used consistently across ELA courses, both due to materials shortages (i.e., the school does not have enough copies of novels for teachers to use them across courses) as well as variations in teacher preferences regarding which particular pieces of literature to include in their courses.

According to NCHS teachers, the math department will undergo a new curriculum adoption process in the near future. Currently, the school uses a Glencoe series for algebra I, geometry, and algebra II. These texts are older, and, according to study participants, not adequately aligned to current standards, so NCHS teachers supplement them with curriculum that they have developed at the school level.

⁵¹ Information about PIC comes from <https://natronaschools.org/pathways-innovation-center-p-i-c/>. Program information for PIC accessed at <https://0d0.988.myftpupload.com/wp-content/uploads/2018/04/PIC-flyer.pdf>.

Science teachers collaborate to determine which curricular materials align with state standards and the recently-adopted Next Generation Science Standards (NGSS) and also fill in any remaining gaps that need to be addressed to give students a comprehensive science education. The science department uses a variety of texts, including Prentice Hall, Glencoe, Holt, and Pearson, and they pull supplemental materials from other sources such as the New Jersey Center for Teaching and Learning science curriculum.

Social studies was in the midst of the curriculum adoption process at the time of data collection. Current social studies resources at NCHS include Glencoe history books, and study participants indicated a reportedly heavy use of primary sources, such as those that teachers obtain from the Library of Congress. According to a study participant, NCHS social studies teachers have flexibility with curriculum and instruction but ensure that they keep similar pacing across courses.

Instructional Program

NCHS takes a two-pronged approach to assigning students to instructional groups. Ninth-grade students are organized into houses, where each house has a multi-disciplinary team of core teachers who work together to support students within the house. Older students follow a more traditional, non-cohort-based high school schedule, where students' assignment to courses is based on the type of courses they take (e.g., traditional, IB).

NCHS educators reported a variety of instructional strategies, including Kagan cooperative learning strategies, Project CRISP (Creating Independence through Student-Owned Strategies) techniques, experimental or experiential learning, guided practice, and direct instruction. Teachers also reported using gradual release techniques (e.g., "I do, we do, you do"). In about 2013, the school moved to the use of a co-teaching model for lower-level ELA, math, science, and social studies courses. In this model, a special educator teaches with the general educator. According to study participants, co-taught courses include some degree of direct instruction, but these courses typically rely more heavily on group work and individualized instruction. The school is 1:1 with iPads.

Interventions for Struggling Students

NCHS provides multiple opportunities for struggling students to receive academic support through their implementation of a robust multi-tiered system of supports (MTSS). These opportunities include interventions within the school day (including an intervention period for all students and an extensive credit recovery program) as well as outside of school hours (including before- and afterschool, Saturday, and summer school options). According to one participant, the school approaches interventions with intentionality and uses multiple formats to provide support.

Each day of the block schedule (Monday through Thursday) includes a thirty-minute period called Mustang Connections. Mustang Connections courses typically enroll 15-18 students. The relatively small nature of these courses allows teachers to offer individualized guidance to students, including encouraging students to seek support from other teachers if they are struggling to master standards. Because Mustang Connections includes a grade check every Monday, students' homeroom teachers have the information they need to help students identify required supports. In addition to academic help, educators use Mustang Connections time to focus on character traits such as respect, responsibility, and integrity. According to a study participant, the Mustang Connections program allows

teachers to build caring relationships with students and provides opportunities for teachers to check in with students on an ongoing basis.

NCHS has additional resources to assist those students who are struggling to master particular skills. Specifically, the school employs a math tutor and a corrective reading teacher. According to a study participant, classroom teachers are supportive of these educators' work and ensure they have access to students for targeted intervention, even if it means the students need to be out of the classroom for part of a block. The special education department, too, runs a study skills course during which time teachers can help students complete their work and organize their time. This study skills course is another opportunity for intervention teachers to work with students.

Another opportunity for extra assistance comes through the NCHS credit recovery program. Under the current principal, NCHS has placed an increased emphasis on credit recovery and has begun to offer a targeted credit recovery approach alongside its traditional credit recovery program. In the targeted approach, students who receive a grade of 50-60 percent in a course can focus on the specific skills, standards, or assignments that they did not master when they took the course initially and can revisit those specific portions of the work instead of taking the whole course over again. The targeted credit recovery approach only allows students to earn a "D" grade, so those students who wish to obtain a higher grade (as well as those students who did not obtain a grade of 50 percent the first time around) can opt to take the whole course again. Resources for this program include a credit recovery educator as well as the use of credit recovery software.

NCHS offers afterschool tutoring Monday through Thursday, and teachers' before-school contract time on Tuesdays and Thursdays is reserved for students to get extra help if needed. Saturday school takes place once per month. NCHS uses grant funding to pay for summer school, which it has offered on the NCHS campus since the discontinuation of a district program three years ago.

Finally, NCHS has several programs for students with specific needs, including an English learner class with a dedicated staff member who works with students on matters of language and culture; a functional life skills (FLS) program for students with profound special needs; and a behavior, academic, and social education (BASE) program for students with severe emotional needs.

In sum, NCHS implements an MTSS system and offers an extremely wide array of strategies to offer students additional support to meet standards. Some opportunities exist across the board for all students (e.g., Mustang Connections), whereas others offer targeted extra instruction to or opportunities for students who face greater challenges with respect to meeting standards.

Assessments

NCHS teachers rely on data from multiple types of assessments. For benchmark and interim data, the school recently shifted from using the ACT suite of assessments to using the WY-TOPP suite of assessments. According to a study participant, while the WY-TOPP modular assessments are good teaching tools, the WY-TOPP interim and modular assessments do not offer data that are broken down by standard strand – thus limiting their utility. Still, teachers at NCHS drill down into WY-TOPP interim and modular assessment data as much as possible to determine where their students need additional support.

Teachers in multiple disciplines (i.e., ELA, math, social studies, CTE) reported the use of common summative assessments, and math teachers also use common formative assessments. The use of common assessments in ELA seems to be more difficult due to courses' use of different novels, but school personnel reported that they intentionally focused on creating skills-based (rather than content-based) standards and administering common assessments that address those skills. Science teachers are in the process of developing common assessments. For those subjects in which common assessments currently exist, teachers use collaborative time in their professional learning communities (PLCs) to review students' work on these assessments and develop strategies for lesson planning and interventions.

Professional Development

NCHS teachers have access to multiple forms of professional development (PD). Most ongoing PD at the school is conducted through teachers' PLCs. PLCs meet twice a week (Mondays and Wednesdays) before school for about 50 minutes per meeting. The PLCs are organized around specific classes (e.g., geometry), though periodically they will meet as the larger discipline (e.g., math). During PLC meetings, NCHS teachers unpack standards, develop assessments, plan for lessons, and review data to inform instruction and intervention.

NCHS teachers also meet as collaborative teams outside of their PLCs. For example, special educators meet as a team once per month, and teachers in the IB program meet a few times a year to work on cross-curricular matters. Ninth-grade teachers who are in the same house meet once per week during common planning time. During this time, teachers in each house discuss cross-curricular matters and also discuss individual students' progress.

Prior to the school year, the school has a large, seven-day PD session that runs similar to a conference. Some sessions at this PD conference are mandatory for all NCHS teachers, but teachers also have a choice to attend sessions that they think will further their growth. Other forms of PD include book studies (e.g., on Marzano strategies), PD from professors at the University of Wyoming, ongoing MTSS trainings, and PD on specific education technology tools that they are using (e.g., iPads, Canvas, the EdReady program).

Summary and Alignment with the Evidence-Based Model

In recent years, NCHS has demonstrated increases in student performance. Specifically, between the 2013-14 and 2018-19 school years, the percentage of NCHS students who scored proficient or above on the state summative assessment increased 22 percentage points, from 33 to 55 percent.⁵² This increase is likely the result of many factors, and this study is not designed to identify these specific factors. What this study does is illuminate the context in which these improvements occurred. According to study participants, NCHS has a culture of school pride, strong building leadership, and a collaborative teaching staff.

In addition to traditional and special instructional programming (e.g., a ninth-grade house system, an IB program, and access to a campus with high-end career and technical education courses), NCHS students

⁵² Please note that the state summative test changed during this time period. See the note on Table 3 for additional information.

also have access to multiple intervention, both within and outside of the school day and year. In-school intervention opportunities include dedicated time set aside in every school day for all students to receive extra support on the specific skills they still need to master, targeted support from a math tutor and corrective reading teacher, and a comprehensive credit recovery program. Interventions outside of school time include afterschool tutoring, Saturday school, and summer school.

NCHS staff engage in many strategies that undergird the Evidence-Based (EB) Model. In particular, they demonstrate the following:

- Analysis of student performance data
- Implementation of professional development through the use of PLCs
- Provision of a multitude of in-school and outside-of-school supports for struggling students, an integral element of the EB Model
- Use of common assessments in several subject areas
- Presence of strong building leadership for data-based decision making.

In 2019-20, NCHS employed a total of 91.1 teachers (55.3 in core subjects, 22.3 in non-CTE electives, and 14.3 in CTE electives). The EB Model would allocate a total of 85.54 teachers to NCHS, with 64.15 of these FTEs allocated toward core teachers and 21.38 of these FTEs allocated toward elective positions (with no additional allocations for CTE). The Legislative Model, on the other hand, would allocate a total of 103.46 positions (76.37 to core teachers, 25.20 for elective teachers, and 1.88 additional FTEs to allow for smaller class sizes in CTE courses). Thus, with respect to both the EB Model and the Legislative Model, staffing for core teaching positions is lower at NCHS than what would be generated in the models. School staff did not highlight class size as a prominent strategy for school improvement. Staffing for electives (including CTE) is higher at NCHS than would be provided under both the EB Model and Legislative Model. Finally, taken together, staffing levels for core, elective, and CTE teacher staffing at NCHS is higher than what would be provided in the EB Model but lower than what would be provided in the Legislative Model.

Sagebrush Elementary School A Case of a High-Performing School in Wyoming

Prepared for the Wyoming Legislature Select Committee on School Finance Recalibration

Kathleen Mulvaney Hoyer

Activate Research, Inc.

Partner to Picus Odden & Associates

December 1, 2020

Executive Summary

Sagebrush Elementary School is located in Sheridan, Wyoming, and is part of Sheridan County School District #2. In 2019-20, Sagebrush enrolled 341 students in kindergarten through fifth grade. In that same year, 84 percent of Sagebrush students were white, 11 percent were Hispanic, and 45 percent were eligible for free or reduced-price lunch. Forty-five percent of the students were “at-risk” as defined by the state funding model. Sagebrush students’ performance on the state summative assessment has been consistently high in recent years. In fact, the percentage of Sagebrush students who scored at or above proficient on the assessment has been over 80 percent in the past three school years. This report describes the context in which this consistently high performance occurred.

Findings Related to School Context

Sagebrush teachers hold high expectations for all students, and staff members who participated in focus groups repeatedly indicated that teachers throughout the school share accountability for student success. Teachers at the school reported a deeply collaborative approach to professional development, curriculum development, and lesson planning. This collaboration is possible due to intentionality in scheduling and protection of shared planning time for teachers in grade-level teams. Sagebrush teachers indicated a strong emphasis on the use of data – especially data from common assessments – to make instructional decisions. Further, Sagebrush greatly prioritizes intervention, such that educators offer opportunities for extra support both within and outside of the school day, and the school is mindful to schedule within-school intervention strategically to maximize instructional staff availability to support struggling learners.

Alignment with the Evidence-Based (EB) Model

Investigations into how the school operates indicate several areas of alignment with the Evidence-Based (EB) Model. For example, many of the strategies Sagebrush staff use align with the EB Model, including setting high student achievement goals, maintaining a professional school culture, making data-based decisions, engaging in collaborative professional development, and providing many opportunities for intervention. Core and elective teaching levels at Sagebrush, however, are slightly lower than the levels generated under the EB Model; put differently, class sizes are modestly higher than what the EB Model would generate.

Introduction

This report is one of ten case studies of Wyoming schools that have improved or demonstrated consistently high student performance in recent years. Taken together, these case studies inform the recalibration of the Wyoming Education Resource Block Grant Model. Specifically, the studies provide information relevant to costing out the basket of goods and services to which Wyoming students are constitutionally entitled. The studies offer insights on how the selected schools have leveraged their resources to foster large improvements in or high levels of student performance. The following sections of this report describe the school's context, student performance, staff, school schedule, approaches to teaching and learning, and professional development. The report draws upon information from two main sources: (1) a review of documents provided by school officials or available online and (2) individual and focus group interviews held virtually via Zoom with 30 members of the district and school staff that occurred in April and September 2020.

School Context

Sagebrush Elementary School is located in Sheridan, Wyoming, a town of nearly 18,000 residents, per Census data. Sheridan is near the Bighorn Mountain Range in the northeastern part of the state; study participants described it as a small, safe town where everyone knows each other. Study participants noted that Sheridan is a supportive community with many extracurricular activities for children, which sometimes have low-cost options or scholarships to try to increase access to these activities – necessary due to economic diversity and disparity in the town. Industries in Sheridan include ranching, mining, and a railroad.

Sagebrush is one of six elementary schools in Sheridan County School District #2, five of which are also located in Sheridan. The school is located in a new neighborhood behind the town's hospital. The school enrollment, though, draws students from a variety of neighborhoods. Study participants indicated that the school demographics have changed over time, partially due to recent boundary changes. The new boundary lines give the school a larger population of students who are approved for free or reduced-price lunch, and the school is a Title I school. Parents of children at the school work in a variety of settings such as in the coal industry, at the nearby hospital, or in the service industry.

Student Demographics

Sagebrush typically enrolls between 300 and 400 students. According to study participants, the school's enrollment recently increased by about 40 students due to redistricting. Study participants did not perceive that the student population is "overly mobile," though one participant estimated that about 20 students may enter or leave the school each year. In 2019-20, Sagebrush enrolled 341 students in kindergarten through fifth grade (Table 1). Given that Sagebrush employs 19 core teachers (see more detail below in the section on staffing), the average core class size across the school was just under 18 students, which is modestly above the average for a K-5 elementary school funded under the EB Model.

Table 1. Sagebrush Elementary School student enrollment and average core class size: 2019-20

Grade level	Enrollment	Average core class size
Kindergarten (4 classes)	67	16.75
First grade (3 classes)	56	18.67
Second grade (3 classes)	53	17.67
Third grade (3 classes)	57	19
Fourth grade (3 classes)	51	17
Fifth grade (3 classes)	57	19
Kindergarten through third grade	233	17.92
All grades	341	17.95

Source: Wyoming Department of Education, "Fall Enrollment Summary By School By Grade for School Year 2019-20," and personal communication with school staff.

In 2019-20, most of the students at Sagebrush were white (84 percent) and just over ten percent were Hispanic (11 percent). Just under half of the students (45 percent) were eligible for free or reduced-price lunch (Table 2). Forty-five percent of students were classified as "at-risk" under the state funding model (that is, the unduplicated count of students eligible for free or reduced-price lunch, English language learner [ELL] students, or mobile students in grades 6-12).

Table 2. Sagebrush Elementary School student characteristics: 2019-20

Student characteristic	Percentage of student population
Race/ethnicity	
American Indian/Alaska Native	-
Asian	-
Black	-
Hispanic	11
Pacific Islander	-
Two or more races	-
White	84
Eligible for free or reduced-price lunch	45
English language learner	-

- Data not reported to protect student confidentiality.

Source: Wyoming Department of Education, "School Level Fall Enrollment by Ethnicity and Gender," "USDA National Food Lunch Program and Local Free and Reduced Lunch Eligibility - School Level For 2019-20," and data provided to the study team by the Wyoming Legislative Service Office.

School Goals

The school's mission is success for all students, and, according to one study participant, "when we say 'all,' we mean 'all.'" Both district and school personnel echoed this sentiment. In their grade-level professional learning communities (PLCs), teachers create specific and ambitious goals for their students. Study participants described this process as one that involves reviewing student data and

making SMART (specific, measurable, achievable, realistic, and timely) goals related to priority standards. For example, teachers in one PLC indicated that when they looked at their incoming students' scores at the beginning of the year, they developed a goal that at least 90 percent of their students will be proficient on assessments in reading, writing, and math. The teachers of this grade level indicated that while they set 90 percent as a technical goal, they work toward proficiency for every student. Other teams and educators throughout the school, similarly, have ambitiously high goals for students. Additionally, the school's goals for students extend beyond academic proficiency. For example, one major behavioral goal is to improve attendance.

School Culture

Three major themes permeated discussions of school culture: (1) school-wide belief that all teachers have responsibility for all students, (2) shared high expectations for students, and (3) multiple resources for teacher collaboration and growth.

Time and again in conversations with school staff members, study participants expressed a belief that students at Sagebrush are “not *my* students, they are *our* students.” That is, teachers believe that they are accountable to every student, regardless of whether students happen to be assigned to their classroom or not. One teacher noted that “teachers [at Sagebrush] genuinely care about kids,” and others expressed a perception that students are aware of this attitude. Participants indicated that every student knows all of the teachers, and students know that they can get support from and interact with any teacher, not just their classroom teacher for that year.

As noted above in the section on school goals, staff in the school and the district at large believe that all students can reach proficiency. Sagebrush teachers have a no excuses philosophy: they take seriously the belief that all students can succeed, regardless of obstacles that may make success more challenging. Staff members consistently expressed this sentiment. In the words of one study participant, “Every single one of them will get there.” Teachers shared that a goal of universal proficiency may have initially seemed impossible, but they embraced a mindset that it is not actually impossible. Staff members believe all students will succeed and are committed to supporting them as they do.

With respect to teacher collaboration and growth, study participants described a culture of collaboration that extends from the district to the school to individual grade levels and into the classroom. In the words of one teacher, their school has “checks and balances in a good way.” Teachers are not isolated but rather have the resources they need to make data-based decisions about curriculum, instruction, assessment, and intervention. According to teachers, such resources are wide ranging and include (1) an intentional effort on the part of school leadership to ensure that grade-level teams have common planning time, (2) ample data with which to make decisions, (3) curricular resources shared across staff members, (4) a school-wide mentality of teachers' desire to learn from each other, and (5) support for growth from administrators and fellow teachers. One teacher recalled days as a new teacher and said that it would have been “impossible for me to fail” at teaching given these supports.

Student Performance

Sagebrush students' performance on state assessments has been consistently high in recent years (Table 3). Specifically, the percentage of students who scored at or above proficient on the state summative assessment has been over 80 percent in the past three school years.

Table 3. Percent of Sagebrush Elementary School students who scored at or above the proficient level on the state summative assessment: School years 2016-17 through 2018-19

Year	Percent of students at proficient or above
2016-17	81
2017-18	84
2018-19	86

Note: Wyoming has changed its summative assessment in recent years and began giving the current test (the Wyoming Test of Proficiency and Progress, or WY-TOPP) in 2017-18. Accordingly, the data for these calculations come from different assessments over time (e.g., the formerly used Proficiency Assessments for Wyoming Students [PAWS] and the WY-TOPP). While changes in test administration make cross-year comparisons more difficult, using data from multiple assessments allows for review of scores over a longer time period.

Source: Data provided to study team by Wyoming Department of Education.

School Staff

According to the Wyoming Department of Education, the average school salary for an elementary school teacher in Sheridan County School District #2 in 2019-20 was \$61,736, which was slightly higher than the statewide average salary for an elementary school teacher (\$60,194).⁵³

As shown in Table 4, Sagebrush has 19 core teachers. Each grade level (kindergarten through grade 5) has three teachers, and kindergarten has a fourth teacher, who teaches a “classic kindergarten” class for students who are kindergarten age but are not ready for a traditional kindergarten curriculum. The school has 2.5 FTE positions for electives, which comprise a half-time art teacher, teachers who are nearly full-time (0.8 FTE each) in music and physical education, and teachers of orchestra and technology who each teach at about a level of 0.2 FTE. Two special education/resource teachers work with students across a variety of levels of need. The school also has 4.5 intervention teachers who provide Tier 2 instruction – 2.5 of these positions, though, are paid through Title I funds. Sagebrush has a full-time librarian as well as a full-time instructional facilitator (which school staff call a “literacy coordinator”).⁵⁴ The school has access to about 0.2 FTE of a district-level gifted and talented educator (called an extension teacher) who provides opportunities for students to access independent study.

⁵³ Data for Sheridan County School District #2 retrieved from the “All Staff by Category and District with Average Salaries” database found at <https://edu.wyoming.gov/data/statisticalreportseries-2/>. Data for Wyoming retrieved from “State Staff by Category with Average Salaries” at the same site.

⁵⁴ According to district personnel, the district employs both math and literacy coordinators. A study participant described these educators as highly trained instructional facilitators who coach teachers (e.g., observe and model), look at data, and work with students. For additional information, see the section on professional development.

Table 4. Staffing at Sagebrush Elementary School, 2019-20

Category	FTE
<i>Licensed Staff</i>	
Core teachers	19.00
Elective teachers	2.50
Instructional facilitators	1.00
Special education teachers	2.00
Tutors/Tier 2 interventionists	4.50
Librarian	1.00
Gifted and talented teachers	0.20
<i>Non-licensed staff</i>	
<i>Aides</i>	
Instructional paraprofessionals	4.50
Special Education self-contained (severe & profound) paraprofessionals	3.00
Special education paraprofessionals	2.00
ESL paraprofessional	1.00
Afterschool program paraprofessional	1.00
<i>Administration</i>	
Principal	1.00
Clerical	1.50
<i>Pupil Support</i>	
Counselor	1.00
Nurse	1.00
Speech language pathologist	0.75
Parent liaison – Compass	0.50
School psychologist	as needed, about 0.20

Source: Conversations with school staff.

Several paraprofessionals support the school in a variety of instructional capacities (i.e., support for ELL students, support for special needs students, support for the afterschool program, other support). The school has no English as a second language (ESL) teachers, but one paraprofessional serves ELL students. Five paraprofessionals work with special education students. Another paraprofessional works with the afterschool program, and this person's compensation comes out of a separate funding stream for the afterschool program. In addition to the ELL, special education, and afterschool paraprofessionals, Sagebrush has 4.5 other FTE paraprofessional positions. Title I funds support three of them. Of the remaining 1.5, one of these positions is for a paraprofessional who works with students in an

instructional capacity, and one paraprofessional works half-time on duties as needed, which may include working in the office or working with students.

The school has one principal, a secretary plus additional clerical support from a paraprofessional, and several pupil support staff members: a counselor, a nurse, a speech language pathologist (at about three-quarters of an FTE), and a psychologist who is contracted by the district on an as-needed basis. Sagebrush has the support from a parent liaison who works at a community organization called Compass. This person works about half-time at the school and is supported through the community organization's funds. The school also has three custodians (not shown in table).

School Schedule

Sagebrush is on a trimester schedule and a five-day school week. The student day starts at 7:55 am and goes until 1:30 pm for kindergarteners and until 2:55 pm for first through fifth graders. The teacher workday typically ends at 3:30 pm, but teachers stay until 4:00 pm on Tuesdays for a school-wide professional development meeting. To compensate for Tuesday's late end, teachers leave one half hour earlier on Fridays.

Approaches to Curriculum, Instruction, Intervention, and Assessment

Curricular Program

Sagebrush does not follow a formal English language arts (ELA) or math curriculum. Instead, all grade levels use teacher-developed and/or teacher-curated curricular resources. According to study participants, around the time of the introduction of the Common Core, the district decided to move away from the use of packaged curricular materials and, instead, teachers work together to identify materials that align with state standards, district proficiency scales, and district curriculum maps. District personnel noted that they have provided teachers training on how to understand the standards and identify high-quality curriculum to align to the standards. Over the years, as teachers selected curricular resources that align with the priority standards, they stored them in a shared folder to which all teachers of particular grade-level teams have access. Sagebrush teachers indicated that these folders are well-organized, easy to use, and filled with quality resources tied to standards – according to one teacher, they do not include any materials they deem to be “fluff.” Materials include teacher-created lessons as well as resources from multiple external sources, such as leveled reading books, Eureka math, Lexia, IXL, Common Core worksheets, and Zearn. Teachers reported that as they teach any given standard in any given year, they refer to the curriculum bank and determine which resource will be most effective with the particular group of students they have in their classroom that year.

Instructional Program

A typical school day includes about 90-120 minutes for instruction in ELA and 60-90 minutes for math. Students also have at least one specials period daily for instruction in art, music, physical education, or technology. In kindergarten through fourth grade, teachers are not departmentalized and as such they have a homeroom of students to whom they teach all core subjects. Still, teachers in these grades frequently (even daily) share students across classrooms, because they group students across classrooms by need for extra intervention or support on specific skills (described in more detail below in the section on interventions). Conversely, fifth-grade teachers are departmentalized, with one teacher responsible for math, another for writing, and another for reading. Throughout grades, study

participants noted that they integrate science and social studies – and, as possible, computer science – into the ELA and math lessons.

Conversations with teachers from across the school highlighted a great deal of consistency in their approach to instruction. Generally, teachers described the use of gradual release, wherein they teach a mini lesson to the whole group and then use small groups or independent work as needed depending on specific students' degree of mastery of the particular skill in question. Teachers described student grouping as being extremely fluid, and they said that they change groups frequently based on review of student data. ELA strategies include the use of guided reading, and for multiple subjects, teachers reported using technology to support instruction (e.g., through the use of math software that offers students guided assistance and opportunities to practice skills), which has been aided by the school's shift to a 1:1 iPad/Chromebook approach a few years ago.

Interventions for Struggling Students

Sagebrush has a wealth of interventions for students who still struggle after Tier 1 instruction. For instance, all students have time built into each day for targeted support and instruction. Every grade implements a "what I need" ("WIN") period every day, and conversations with school staff suggested that educators at the school perceive WIN groups to be a vital component of their instructional program. During the WIN time, multiple staff members work with data-based student groups to target instruction to specific skills that the students need to master. The school created its schedule intentionally to stagger WIN times across grades as much as possible so that a wide range of instructional staff – including special education/resource teachers, interventionists, Title I teachers, the librarian, and paraprofessionals – are able to work with WIN groups across grades. Because the purpose of WIN groups is to help students with very specific strategies, membership in specific WIN groups changes quickly. Teachers noted that they change groups approximately every two to three weeks or, rarely, monthly. Additionally, whether in WIN groups or at other times when they provide push-in or pull-out instruction, intervention and Title I teachers work with students to help get them to grade level. These teachers rely on a variety of materials, including materials from the Reading Recovery and Math Recovery programs.

Special educators, both resource teachers and special education paraprofessionals, work with students on a range of skills depending on student need. Some instruction may focus on life skills, and much instruction focuses on academic skills. The special educators use a variety of curricular materials, such as a math program called Equals as well as Reading Recovery and Literacy Lessons.

In addition to these in-school opportunities for intervention, Sagebrush offers both an afterschool program and a summer program. The afterschool program, which includes a partnership with Big Brothers/Big Sisters, includes academic elements as well as enrichment activities that vary based on student and teacher interest. The program is open to any student who is interested in attending, though the school has had to put a cap on enrollment in past years due to enrollment demand that outpaces staffing supply. Summer school is a two-week program that helps students boost skills that they may have lost since the end of the school year. Enrollment in summer school depends on teacher and parent recommendation.

Assessments

According to study participants, teachers at Sagebrush are “constantly looking at data.” Throughout the school, teachers use data for a variety of purposes, such as to set school-wide improvement goals, set classroom-level goals, set learning targets for students, assign students to WIN group cycles, assess student progress toward mastery of standards, identify effective instructional strategies, and make decisions about which curricular materials to use for any given unit.

Sagebrush uses Fountas and Pinnell benchmarks three times per year for every student. Sagebrush teachers also administer district-level assessments in math and writing. According to study participants, teachers throughout the district created and continually modify these district assessments based on ongoing review of student work and collaborative conversations regarding what constitutes proficiency. Teachers at the school also give mid- and end-of-unit assessments (which the teachers often administer in common and at the same time across class sections), and they use district- and school-level, teacher created common formative assessments. These more formal formative assessments exist alongside a variety of other more informal formative assessment practices such as the use of exit tickets, daily check-ins, extensive feedback on writing assignments, Edulastic assessment materials, and running records binders that give ongoing information about students’ progress toward reading proficiency.

Professional Development

Much of the professional development (PD) for Sagebrush educators comes through collaboration with peers in their grade, school, and district.

District personnel described an intensive and intentional district-wide approach to professional learning communities (PLCs). Multiple study participants indicated that their PLCs – which include grade-level teachers, other educators (e.g., intervention teachers), the literacy coach (instructional facilitator), and the principal – are a major source of teacher PD. One study participant called them the “driving force” at each grade level, as they are not only the source of PD but also the vehicle for the creation of many resources (curriculum, instruction, assessments) that teachers use throughout the year. According to this participant, “the power is in the process.” That is, this participant perceived that the process of creating these materials has been an impactful source of teacher professional learning. PLCs meet formally once per week during common planning time and engage in activities such as creating curricular or assessment materials, reviewing student data, doing weekly readings, learning from each other, and discussing how to implement what they are learning in their classrooms. Additionally, grade-level teams may meet more frequently than the one formal PLC time per week to continue to plan with each other.

Additional collaboration occurs school-wide. For example, the whole staff meets after school once per week to discuss matters that impact all grades. A current focus of these meetings is on vertical alignment of curriculum and assessments. Further, about two years ago, the school started the practice of videotaping lessons so that teachers can get feedback from each other on their instructional practice. Study participants indicated that this practice has served as an important source of PD, as they perceive that their peers throughout the building have a great deal of expertise and they value learning from each other.

Sagebrush teachers also meet with their colleagues throughout the district periodically (e.g., every three months during the school year and additional times during the summer) to engage in PD and create

district-level materials around priority standards and assessments. According to district personnel, these PD opportunities are incredibly targeted to the needs of teachers and students in the district. Instead of adopting the “flavor of the month” in terms of PD, the district identifies particular areas in need of support and uses either external trainers or experts within the district to provide PD in that specific area. Through targeted training and support, the district can ensure that instructional facilitators (called math and literacy coordinators) and principals are able to provide necessary coaching and support to teachers throughout the district – an “integral” part of teacher support in Sheridan County School District #2.

While the majority of study participants’ conversation around PD highlighted these on-going collaborative activities, teachers in the school also said that they had access to other forms of PD. For example, the district literacy coordinators train teachers on balanced literacy, and the Reading Recovery and Math Recovery intervention teachers train other teachers in the school on these programs. Teachers recalled having PD on Strength in Numbers, and they shared that they use Solution Tree as a source of PD as well. Finally, teachers described book studies as an additional source of PD.

Summary and Alignment with the Evidence-Based Model

Sagebrush students’ scores on the state summative assessment have been consistently high in recent years. That is, the percentage of students who scored at or above the proficient level has been over 80 percent for the past three years.⁵⁵ Several factors have likely influenced this consistent high performance, and this study is not designed to identify how specific strategies relate to student performance. What this study does is illuminate the context in which this high achievement exists. According to study participants, this context includes an ongoing, collaborative approach to curriculum and instruction where teachers work together to identify resources and administer common assessments. The school offers multiple opportunities for intervention, starting with classic kindergarten and persisting across grades with daily WIN periods, Math and Reading Recovery, and afterschool opportunities. Finally, school staff hold high expectations for students and share accountability for student outcomes.

Investigations into how the school operates indicate several areas of alignment with the Evidence-Based (EB) Model. For example, many of the strategies Sagebrush staff use align with the EB Model, including the following activities:

- Setting high goals for students
- Adopting an articulated, schoolwide curriculum program
- Creating a professional culture marked by a shared, common approach to instructional practices and accountability for student results
- Analyzing data to make decisions about school goals, curriculum, and instruction
- Engaging in ongoing professional development marked by PLC collaboration
- Providing many opportunities for interventions for students who struggle after Tier 1 instruction, including multiple opportunities during the regular school day (WIN periods and Math and Reading Recovery) as well as extended day and summer school programs.

Moreover, the high levels of student performance have been produced with modestly fewer staff than either the EB or Legislative Models would provide. That is, Sagebrush has 21.5 core and elective

⁵⁵ Please note that the state summative test changed during this time period. See the note on Table 3 for additional information.

teachers, lower than the EB Model's allocation of 24.27 teachers and the Legislative Model's allocation of 26.03 teachers.

Stagecoach Elementary School A Case of an Improving School in Wyoming

Prepared for the Wyoming Legislature Select Committee on School Finance Recalibration

Kathleen Mulvaney Hoyer

Activate Research, Inc.

Partner to Picus Odden & Associates

December 1, 2020

Executive Summary

Stagecoach Elementary School is located in Rock Springs, Wyoming, and is one of 12 schools that educate elementary students in Sweetwater County School District #1. In the 2019-20 school year, Stagecoach Elementary School enrolled 301 kindergarten through fourth-grade students. In that same year, 63 percent of Stagecoach students were white, 28 percent were Hispanic, 6 percent were two or more races, and 36 percent of the students were eligible for free or reduced-price lunch. Thirty-nine percent of the students were “at-risk” as defined by the state funding model. Student achievement at Stagecoach improved between the 2016-17 and 2018-19 school years. Specifically, during that time period, the percentage of Stagecoach students who scored at or above proficiency on the state’s summative test increased 14 percentage points. This study describes the context in which these improvements occurred and analyzes how, if at all, the school’s strategies and staffing align with the Evidence-Based (EB) Model.

Findings Related to School Context

Stagecoach staff described a “very powerful” professional learning community (PLC) process wherein teachers meet frequently to analyze student data and collaborate on decisions regarding lesson plans and assessment. Additionally, Stagecoach teachers described a district-wide, structured approach to curriculum development which includes the adoption and implementation of a common and vertically-aligned curriculum for all subject areas (including English language arts and math). Furthermore, according to school personnel, staff invest time and effort to engage parents in school life and to provide a wide variety of academic and behavioral supports for all Stagecoach students, with additional support for struggling students.

Alignment with the Evidence-Based Model

Investigations into how the school operates indicate areas of alignment and divergence with the EB Model. For example, many of the strategies Stagecoach staff use align with the EB Model. Specifically, they set clear goals, cultivate a professional school culture, make data-based instructional decisions, implement a common and vertically aligned curriculum, and provide multiple opportunities for intervention. Core and elective teacher staffing levels, though, diverge slightly from what the EB Model would recommend, such that staffing for these positions is lower at Stagecoach than would be recommended in the Model.

Introduction

This report is one of ten case studies of Wyoming schools that have improved or demonstrated consistently high student performance in recent years. Taken together, these case studies inform the recalibration of the Wyoming Education Resource Block Grant Model. Specifically, the studies provide information relevant to costing out the basket of goods and services to which Wyoming students are constitutionally entitled. The studies offer insights on how the selected schools have leveraged their resources to foster large improvements in or high levels of student performance. The following sections of this report describe the school's context, student performance, staff, school schedule, approaches to teaching and learning, and professional development. The report draws upon information from two main sources: (1) a review of documents provided by school officials or available online and (2) individual and focus group interviews held virtually via Zoom with 15 members of the school staff that occurred in April 2020.

School Context

Stagecoach Elementary School is located in Rock Springs, Wyoming, in the southwestern corner of the state. According to Census data, Rock Springs has just under 23,000 residents. Stagecoach is one of 12 schools that educate elementary students in Sweetwater County School District #1 and one of five elementary schools located relatively close to one another in the city of Rock Springs. All of the elementary schools, including Stagecoach, have enrollment boundaries. Additionally, the district has designated Stagecoach as the overflow school that enrolls students when the other elementary schools are over-enrolled. The school serves children in kindergarten through grade 4. In addition to its general education program, it also has three special programs that serve a very small number of students with extreme special needs: an alternative communication program, an alternative daily life skills program, and an alternative behavior program.

The school itself is positioned in a relatively affluent part of the community, and some Stagecoach students live in the neighborhood. However, because the school serves as an overflow school, students from other enrollment boundaries attend the school. Thus, the school's student body is diverse with respect to socioeconomic status. In fact, Stagecoach is a Title I school. Parents of students at the school work in a variety of fields, including the healthcare, law, energy, and service industries. Some parents of students at the school are unemployed.

Stagecoach is a new school, and according to study participants, it has been open for only five years. Its enrollment has fluctuated across time. According to one study participant, a main driver in this fluctuation is a policy change that allowed for larger class sizes. This change meant that other schools did not need to send as many students to Stagecoach for overflow purposes.

Student Demographics

According to the Wyoming Department of Education, Stagecoach Elementary School enrolled 301 kindergarten through fourth-grade students in the 2019-20 school year (Table 1). Given a core teacher staffing level of 16 teachers (see more detail below in the section on school staffing), the average core class size in 2019-20 was just under 19 students.

Table 1. Stagecoach Elementary School student enrollment and average core class sizes, 2019-20

Grade level	Enrollment	Average core class size
Kindergarten (4 classes)	57	14.25
First grade (3 classes)	62	20.67
Second grade (3 classes)	53	17.67
Third grade (3 classes)	66	22.00
Fourth grade (3 classes)	63	21.00
Kindergarten through third grade	238	18.31
All grades	301	18.81

Source: Wyoming Department of Education, "Fall Enrollment Summary By School By Grade for School Year 2019-20," and personal communication with school staff.

In the 2019-20 school year, most of the students at Stagecoach Elementary School were white (63 percent), Hispanic (28 percent), or two or more races (6 percent). Just over one-third (36 percent) of the students were eligible for free or reduced-price lunch and 12 percent were English language learner (ELL) students (Table 2). Thirty-nine percent of students were classified as "at-risk" under the state funding model (that is, the unduplicated count of students eligible for free or reduced-price lunch, ELL students, or mobile students in grades 6-12).

Table 2. Stagecoach Elementary School student characteristics: 2019-20

Student characteristic	Percentage of student population
Race/ethnicity	
American Indian/Alaska Native	-
Asian	-
Black	-
Hispanic	28
Pacific Islander	-
Two or more races	6
White	63
Eligible for free or reduced-price lunch	36
English language learner	12

- Data not reported to protect student confidentiality.

Source: Wyoming Department of Education, "School Level Fall Enrollment by Ethnicity and Gender," "USDA National Food Lunch Program and Local Free and Reduced Lunch Eligibility - School Level For 2019-20," and data provided to the study team by the Wyoming Legislative Service Office.

School Goals

Teachers described Stagecoach as a "goal-driven school" and indicated that the school's goals are "pretty extensive." Specifically, in 2019-20, Stagecoach's goal was for 100 percent of the students to demonstrate one year of growth in reading. According to a school staff member, school personnel intentionally selected a goal based on academic growth (rather than proficiency) because they wanted the goal to be relevant for all students, even those students who were well below proficiency in reading.

In addition to creating school-wide goals, teachers also set subject-specific goals for their classrooms and work with students to help them create their own SMART (specific, measurable, achievable, realistic, and timely) goals. Study participants noted that the school is currently working on new mission and vision statements. To do this work, the entire staff is collaborating during staff meetings to reflect on their goals (e.g., reflecting on what constitutes a five-star school, where they are now, and what they need to do to achieve five-star status).

School Culture

School staff members described a culture that is marked by strong building leadership, school-wide accountability for high achievement, a high-quality instructional staff, and efforts to promote parent engagement. Specifically, with respect to building leadership, teachers indicated that the principal is “supportive” of teachers and genuinely cares about them. Teachers also reported that the principal has worked hard to create a positive school culture where teachers and students are happy to be at school and parents want to be involved.

Regarding school-wide accountability for results, study participants noted that school staff hold “high expectations” for students that “drive everything else.” When asked why they thought they achieved recent student performance gains, staff noted that teachers in the school hold collective responsibility for student achievement. Study participants noted that Stagecoach teachers believe that what happens at the younger grades affects what happens at the older grades, so teachers of the younger students feel that the performance of older students is their responsibility as well. Thus, the teachers reported that they “work as a team” and that “everybody is working together to make the kids better.”

Study participants described Stagecoach teachers as an “incredible group” who are “reflective on practice” who “work extremely hard together.” Teachers rely on student performance data to pinpoint areas for improvement, and they rely on each other to strengthen their practice and support students. Staff members described a cohesive staff environment where teachers do not feel as though they are alone. In fact, the opposite is true: study participants said that at Stagecoach, it is not acceptable for teachers to close their doors and do what they want to do in their own classrooms. Instead, the culture is one of collaboration and shared practice.

With respect to parent engagement, one teacher shared that the school “works diligently” to engage parents and the community through a variety of activities. For example, the school holds many family and community engagement activities that study participants said are well attended; according to teachers, they “celebrate a lot.” Additionally, staff members described efforts to engage parents of ELL students by using translated materials and interpreters at events.

Student Performance

From the years 2016-17 to 2018-19, the percentage of Stagecoach students who were at or above proficient on the state summative assessment increased by 14 percentage points (Table 3).

Table 3. Percent of Stagecoach Elementary School students who scored at or above the proficient level on the state summative assessment: School years 2016-17 through 2018-19

Year	Percent of students at proficient or above
2016-17	47
2017-18	58
2018-19	61

Note: Wyoming has changed its summative assessment in recent years and began giving the current test (the Wyoming Test of Proficiency and Progress, or WY-TOPP) in 2017-18. Accordingly, the data for these calculations come from different assessments over time (e.g., the formerly used Proficiency Assessments for Wyoming Students [PAWS] and the WY-TOPP). While changes in test administration make cross-year comparisons more difficult, using data from multiple assessments allows for review of scores over a longer time period.

Source: Data provided to study team by the Wyoming Department of Education.

School Staff

According to the Wyoming Department of Education, the average school salary for an elementary school teacher in Sweetwater County School District #1 in 2019-20 was \$59,391, which was slightly lower than the statewide average salary for an elementary school teacher (\$60,194).⁵⁶

⁵⁶ Data for Sweetwater County School District #1 retrieved from the “All Staff by Category and District with Average Salaries” database found at <https://edu.wyoming.gov/data/statisticalreportseries-2/>. Data for Wyoming retrieved from “State Staff by Category with Average Salaries” at the same site.

Table 4. Stagecoach Elementary School staffing levels, 2019-20

Category	FTE
<i>Licensed staff</i>	
Core teachers	16.00
Elective teachers	2.80
Special education teachers self-contained (severe & profound)	2.00
Special education teachers	5.00
ESL teachers	1.00
Tutors/Tier 2 interventionists	1.50
Librarian	0.33
<i>Non-licensed staff</i>	
<i>Aides</i>	
Instructional paraprofessionals	1.50
Special education paraprofessionals self-contained (severe & profound)	4.88
Special education paraprofessionals	2.63
<i>Administration</i>	
Principal	1.00
Clerical	1.75
<i>Pupil support</i>	
Counselor	1.00
Nurse	1.00
Social worker	0.50
Speech therapist	0.75
Occupational therapist	0.50
Physical therapist	0.50

Note: All of the paraprofessionals work 29 hours per week, which is considered part-time. For the purposes of this FTE count, each paraprofessional is counted as 0.75 of an FTE.

Source: Conversations with Stagecoach Elementary School staff.

Stagecoach has 16 core teachers, including four teachers in kindergarten (three for traditional kindergarten classes and a fourth for a “kinderboost” class, which is described in more detail in the section on curriculum) plus three teachers in each of the grades 1 through 4. Electives teachers offer specials at just under 3 FTE positions (0.5 of an FTE for art, one FTE for music, and about 1.3 FTE for physical education and health).⁵⁷ Seven FTE teaching positions support students with special needs: two teachers work in the school’s special programs for students with severe special needs, and five others are special education/resource teachers in each of the school’s five grades. One English as a second language (ESL) teacher works with ELL students, and two interventionists (both of whom are supported

⁵⁷ Three additional district personnel – not included in this total – attend physical education with students who have severe special needs.

by Title I funds) provide additional support to struggling learners. The school has access to 0.3 FTE of a librarian. Several instructional paraprofessionals support these teachers. One works in the kindergarten, one serves ELL students, and the rest work to support students with special needs.

School administration includes one full-time principal, a secretary, and an office paraprofessional. Stagecoach has several staff members who support students' mental or physical health, including a counselor, a nurse, and three-quarters of an FTE for a speech language pathologist. The school has half-time support from a social worker, occupational therapist, and physical therapist. Stagecoach also has access to services from a psychologist who sees students virtually and a paraprofessional who works with the psychologist. Two part-time staff work in the lunchroom and three custodians serve the building (not shown in table).

The school did not have any instructional facilitators in the 2019-20 school year. This was a change from prior years, when the school had an instructional facilitator in the building. According to school staff, the school lost the instructional facilitator position due to budget cuts, and the loss of this position has had a negative impact on its ability to offer instructional coaching to teachers in the school (as described in more detail in the section on professional development).

School Schedule

Stagecoach operates on a traditional five-day schedule. The student day starts at 8:10 am and goes until 3:24 pm, and the teacher day runs from 7:50 am to 3:40 pm.

Approaches to Curriculum, Instruction, Intervention, and Assessment

Curricular Program

Curriculum development process

Sweetwater County School District #1 engages in a multi-year, collaborative process to design curriculum for all content areas. The process is ongoing and iterative, and it involves participation from school-level educators in subject area committees. These committees develop benchmarks and standards for each content area (based on the Common Core standards as well as on administrator, teacher, and parent perceptions of needs specific to state and local context), select primary curricular materials, and create district common assessments. After teachers from across the district pilot the curriculum and assessments, the committees refine the materials. This development process covers all subject areas for kindergarten through grade 12. The process repeats regularly on a staggered basis – that is, the district works on different subjects in different years (and different stages of the process in different years) and has plans in place to repeat the process to update the curriculum for each subject on a cyclical basis.

Curricular materials

Across the board, Stagecoach teachers reported using these district-selected materials in their classes. For English language arts (ELA), these materials are from ReadyGEN, and for math, these materials are from Eureka. Classroom teachers also reported that they supplemented these materials, as needed, with other resources from varied sources such as Six-Minute Solutions, IXL, the Write Tools, the Reading for Success novel series, and Zearn. The special education/resource teachers use curriculum from Reading Mastery, Corrective Reading, and Connecting Math. Additionally, the district has a kinderboost

program for very young kindergarteners, and Stagecoach is one of two elementary schools in the district to have this program. Unlike the other grades, the district does not have an official curriculum map for the kinderboost program. Rather, the kinderboost teacher pulls materials for this program that focus on both academic and social-emotional skills.

Instructional Program

According to a study participant, Stagecoach students generally have 60 minutes per day for ELA and another 60 for math, 30 to 45 minutes for intervention, one or two specials periods per day, and time for science, social studies, writing, lunch, and recess. Stagecoach teachers noted that while they often start lessons with whole-group instruction, they rely extensively on small-group work where they can differentiate instruction. Small groups often work in centers dedicated to specific topics or skills. In ELA, examples of these centers include a writing center, a comprehension center, a fluency center, and a vocabulary center. In math, teachers reported using hands-on activities such as manipulatives or educational games. Additionally, study participants indicated the use of “high-yield strategies” such as fostering collaborative learning or focusing on vocabulary. At Stagecoach, classroom teachers receive additional support from special education/resource teachers, intervention teachers, and ELL educators (i.e., the teacher or paraprofessionals) who co-teach or offer in-class small group instruction as often as possible.

Interventions for Struggling Students

Stagecoach uses an achievement monitoring program (AMP) to track academic achievement and a multi-tiered system of supports (MTSS) approach to track behavioral matters. The paragraphs below discuss supports offered to students in each area.

Academic Interventions

Every Stagecoach student has access to intervention within the school day. Across the school, teachers provide 30 to 40 minutes for intervention daily, during which time they “flood” or “flex” students across grade-level classrooms to group students by specific skills-based needs. Teachers place students into groups based on review of data, and group membership changes frequently (for example, every two weeks). During this time, teachers focus instruction on the specific skills that the students in the group need to master.

Additionally, according to school staff, Stagecoach began to implement a new intervention strategy in the 2019-20 school year. Staff members reported that students who are below grade level receive individual learning plans, or ILPs. Students who specifically need additional support in reading get an individual reading plan, or IRP. These plans are extremely targeted to the individual student. For instance, if the student is an English learner, his or her goals may be focused on language acquisition.

These plans allow for the school to target support to specific student needs and to track student progress toward proficiency.

With respect to interventions outside of the school day, school staff indicated that Stagecoach has an afterschool intervention program. The school does not currently have a summer school program, though a study participant shared that they are considering adding one.

Behavioral Interventions

Similar to academic interventions, Stagecoach personnel provide behavioral support to all students, which is followed up by additional targeted support to students who continue to demonstrate need.

With respect to school-wide behavioral interventions, Stagecoach staff are consistent about encouraging and rewarding good behavior. For example, one of the students' specials periods is with the school counselor, who teaches positive behavior strategies. Additionally, the school organizes teachers and students into "houses." School staff award points to houses for good behavior, and the house with the most points at the end of the year gets to participate in a special event. School personnel also reward positive behavior in other ways, including through the use of positive referrals to the principal's office and positive calls home to parents. Stagecoach has quarterly Positive Behavior Interventions and Supports (PBIS) assemblies. Still, some students need behavioral support that goes beyond positive reinforcement of good behavior. These students receive extra support in a variety of ways, including time with the counselor or social worker.

Assessments

Stagecoach educators regularly rely on student data to inform multiple aspects of instruction, such as instructional strategies, student grouping, and the topics upon which teachers need to increase focus. In fact, teachers spend half of their PLC time working as a data team assessing student data. For instance, with respect to decisions about instructional strategies, teachers compare assessment scores for the same student, and if the student did better on one assessment than another (all else being equal), the teachers discuss which instructional strategy seemed to work better for the child so they know to use that strategy in the future. With respect to student grouping, teachers place students into instructional groups if they need extra support for a particular skill, and once the student's assessment information indicates that they have mastered the skill, teachers remove the student from that group.

Study participants reported the use of a wide variety of assessment data for these purposes. They use district common assessments – the assessments created by the curriculum development process described above – to track progress in reading, writing, and math. Teachers reported that they administer these district assessments quite frequently, since they give a pre- and post-assessment for multiple topics in each of the three subjects. Stagecoach teachers also said that they use assessments based on the ReadyGEN and Eureka curricular materials. Some grades (kindergarten through grade 2) use Acadience/DIBELS assessments, and the school also uses the WY-TOPP modular assessments. To track behavior issues, the school uses the PBIS School-Wide Information System (SWIS), which provides information about minor and major discipline referrals each month.

Professional Development

The vast majority of professional development (PD) at Stagecoach is ongoing and collaborative, either through their grade-level PLCs or through whole-school staff meetings.

Study participants consistently highlighted the importance of their PLCs not only to make decisions about instruction (as described above in the section on assessments) but also for their professional growth. PLCs meet twice every six days during collaborative planning time, once for the data team meeting as described earlier and another time to create collaborative lesson plans. PLCs also work together to meet goals on the school's PD plan. According to a study participant, this process is "very powerful."

As a staff, Stagecoach teachers work together to advance goals as set forth by the building leadership team (BLT), and they also meet to discuss substantive issues in staff meetings. For instance, in the 2019-20 school year, the focus of the staff meetings was on standards so that teachers "know the why" behind their lessons. At the time of the interviews and focus groups, a study participant noted that the plan for the 2020-21 school year is to work on vertical articulation for reading, writing, and math.

Both PLCs and staff meetings also serve an important function with respect to instructional coaching at Stagecoach. As noted above in the section on staffing, the school had no instructional facilitator in 2019-20. According to a school staff member, the recent loss of support from an instructional facilitator has had a negative impact on the amount of coaching Stagecoach teachers receive. When the school had a school-based instructional facilitator, teachers could reach out for coaching and support. Now, similar support must come from the principal, which is challenging due to constraints on the principal's time and due to the fact that, as an administrator, the principal serves an evaluative function in the school. Thus, educators at Stagecoach have worked to approach coaching by using their planning periods to observe each other's classrooms, recording their lessons and discussing them during PLC time, or using staff meetings to discuss questions of instructional practice.

A study participant noted that in addition to these collaborative forms of professional development, Stagecoach teachers participate in district-offered professional development. Examples of these offerings include PD on the ReadyGEN materials and through Solution Tree. Further, a study participant noted that teachers at her grade level received extensive PD on Kagan strategies, which emphasize student cooperative learning. Others indicated that teachers in the school had received training on educating ELL students.

Summary and Alignment with the Evidence-Based Model

In recent years, Stagecoach Elementary School has improved students' performance. In fact, the percentage of Stagecoach students who scored at or above proficiency on the state summative assessment jumped 14 points between 2016-17 and 2018-19.⁵⁸ Several factors have likely influenced this increase, and this study is not designed to identify the specific strategies related to specific increases. What this study does is illuminate the context in which these improvements occurred: a "goal-driven" school whose culture includes collaboration, shared practice, and a robust PLC process. Teachers at the school share responsibility for student success, regardless of grade level. Further, Stagecoach teachers use a consistent, common, vertically-aligned curriculum and rely extensively on data to make decisions about instruction and intervention.

⁵⁸ Please note that the state summative test changed during this time period. See the note on Table 3 for additional information.

Investigations into how the school operates indicate areas of alignment and divergence with the Evidence-Based (EB) Model. For example, many of the strategies Stagecoach staff use align with the EB Model. These strategies include the following activities:

- Embracing clear goals (specifically, expressing a goal of one year of growth in reading for every student)
- Cultivating a professional school culture (here, where teachers at all grade levels accept responsibility for student achievement)
- Analyzing student data and engaging in data-based decisions (here, meeting in data teams/PLCs regularly)
- Adopting common and vertically aligned curriculum (in this case, based on the district's curriculum adoption process) including using common assessments
- Providing multiple opportunities for intervention (at Stagecoach, this happens consistently for all students for both academics and behavior).

Core and elective teacher staffing levels, though, diverge slightly from what the EB Model would recommend. Specifically, the number of core teachers at Stagecoach (16.00) is lower than what would be provided in the EB Model (18.53), and class sizes are larger at Stagecoach than would be generated through the Model. Similarly, elective teacher staffing at Stagecoach is lower than what would be provided in the EB Model (2.80 in practice vs. 3.71 that would be generated under the model). Stagecoach core and elective staffing levels are also lower than numbers generated through the state's Legislative Model, which would provide 18.96 core and 3.79 elective teachers.

Wind River High School A Case of an Improving School in Wyoming

Prepared for the Wyoming Legislature Select Committee on School Finance Recalibration

Kathleen Mulvaney Hoyer

Activate Research, Inc.

Partner to Picus Odden & Associates

December 1, 2020

Executive Summary

Wind River High School (WRHS) is located in Pavillion, Wyoming, and it shares its building and several staff members with the middle school. The high school draws students from many very small communities, including Pavillion, Midvale, Kinnear, Crowheart, Johnstown, and the nearby Wind River Native American reservation. In 2019-20, the school enrolled 108 students. In that school year, 64 percent of students at the school were white, 22 percent were American Indian/Alaska Native, and 11 percent were two or more races. About 40 percent of the students were eligible for free or reduced-price lunch, and 42 percent of the students were “at-risk” as defined by the state funding model. Between the 2013-14 and 2018-19 school years, the percentage of Wind River High School students who scored at or above proficient on the state’s summative test increased 35 percentage points. This study describes the context in which these improvements occurred and analyzes how, if at all, the school’s strategies and staffing align with the Evidence-Based (EB) model.

Findings Related to School Context

Interviews and focus groups with school staff described a school culture that expects students to submit high-quality work and requires that students receive extra support to complete work when necessary. To support this culture of high expectations and student accountability, WRHS educators prioritize strong Tier 1 instruction and offer several opportunities to support struggling learners. Specifically, teachers at the school reported a concerted effort to identify standards-based curriculum and to administer common assignments and assessments. WRHS students have access to multiple types of interventions, both within and outside of the school day. WHRS teachers, too, receive several opportunities for growth. Teacher professional development includes time for collaboration and coaching as well as access to a mentorship program designed to support teachers who are new to the district.

Alignment with the Evidence-Based Model

Investigations into how the school operates indicate areas of both divergence and alignment with the EB Model. While the school’s staffing diverges from what the EB Model would generate in terms of teaching positions, WHRS staff members’ strategies align with the EB Model in several ways. Specifically, WRHS staff set ambitious goals, teach a common curriculum and administer common assessments when possible, implement collaborative professional development with instructional coaching, rely on strong leadership to make data-based decisions, and provide sustained opportunities for extra help for struggling students.

Introduction

This report is one of ten case studies of Wyoming schools that have improved or demonstrated consistently high student performance in recent years. Taken together, these case studies inform the recalibration of the Wyoming Education Resource Block Grant Model. Specifically, the studies provide information relevant to costing out the basket of goods and services to which Wyoming students are constitutionally entitled. The studies offer insights on how the selected schools have leveraged their resources to foster large improvements in or high levels of student performance. The following sections of this report describe the school's context, student performance, staff, school schedule, approaches to teaching and learning, and professional development. The report draws upon information from two main sources: (1) a review of documents provided by school officials or available online and (2) individual and focus group interviews held virtually via Zoom with 14 administrative and instructional school staff members that occurred in March 2020.

School Context

Wind River High School (WRHS) is located in Pavillion, Wyoming, a small town of about 230 residents, according to recent Census information. A study participant described Pavillion as a friendly town where everyone knows everyone else. The town is located in close proximity to the Wind River Mountain Range, and residents enjoy activities like hunting, fishing, and outdoor sports. Families in Pavillion and surrounding communities work in a variety of fields, including agriculture, energy, and the natural resource industry.

WRHS is the only traditional high school in the district (Fremont County School District #6),⁵⁹ and it shares its building – and several staff members – with the middle school. The high school draws students from several very small communities, including Pavillion, Midvale, Kinnear, Crowheart, Johnstown, and the nearby Wind River Native American reservation. Many of these communities or outlying areas are very remote, and some families do not have cell phone service or Internet access. Given the large geographic size of the district, students from more distant communities travel up to an hour to get to the school. According to study participants, students at the school come from diverse backgrounds, where some students have parents with postsecondary education, others have parents without postsecondary education, and still others are the first generation to attend high school. Further, as described in more detail in the section on student demographics, the school is also relatively diverse with respect to student race/ethnicity and student socioeconomic status (SES).

Student Demographics

Information from the Wyoming Department of Education notes that the school enrolled 108 students in 2019-20 (Table 1). According to information from the Wyoming Department of Education, the average English language arts (ELA) and math class size in 2019-20 was 12.69 students.⁶⁰

⁵⁹ As noted in the section on behavioral interventions, the district has an alternative school that serves a very small number of students.

⁶⁰ Calculation provided to the study team by the Wyoming Department of Education, based on analysis of combined wde684 student, wde684 section, and wde638 course data sets.

Table 1. Wind River High School student enrollment: 2019-20

Grade level	Enrollment
9	27
10	24
11	25
12	32
Total	108
Average core class size across grades	14.4

Source: Wyoming Department of Education, "Fall Enrollment Summary By School By Grade for School Year 2019-20."

In 2019-20, the student population at WRHS was composed mainly of students who were white (64 percent), American Indian/Alaska Native (22 percent), or two or more races (11 percent). Two-fifths (41 percent) of the students were eligible for free or reduced-price lunch (Table 2). Forty-two percent of the students were classified as "at-risk" under the state funding model (that is, the unduplicated count of students eligible for free or reduced-price lunch, ELL students, or mobile students in grades 6-12).

Table 2. Wind River High School student characteristics: 2019-20

Student characteristic	Percentage of student population
Race/ethnicity	
American Indian/Alaska Native	22
Asian	-
Black	-
Hispanic	-
Pacific Islander	-
Two or more races	11
White	64
Eligible for free or reduced-price lunch	41
English language learner	-

- Data not reported to protect student confidentiality.

Source: Wyoming Department of Education, "School Level Fall Enrollment by Ethnicity and Gender," "USDA National Food Lunch Program and Local Free and Reduced Lunch Eligibility - School Level For 2019-20," and data provided to the study team from the Wyoming Legislative Service Office.

School Goals

According to school personnel, everything that WRHS instructional staff do is "driven by student success." Consistently, study participants relayed a message of high expectations for students. In fact, one participant indicated that the school's "BHAG" or "big, hairy, audacious goal" is for "all students [to be] proficient on priority standards," or those standards deemed by subject-area collaborative teams to be the most essential for students to master. More specific subject-area goals feed into this overarching goal, and school staff described a standards- and data-driven, collaborative approach to setting goals that includes mid-year progress checks. In addition to these priority standards goals, school personnel

reported that they set achievement goals for the Wyoming Test of Proficiency and Progress (WY-TOPP) and the ACT. For example, teachers reported that they have a goal for students to get a score of 20 or higher on the ACT, and they incentivize this goal by waiving in-school tests for students who attain that score.

School Culture

Several comments from interviews and focus groups described how adults in the building interact with students and highlighted their commitment to high expectations. For example, staff shared that they are serious about all students reaching high levels of performance and described efforts to ensure that students are “not going to slide under the radar.” Such efforts include requiring all students to submit all coursework, no matter how late. In the words of one study participant, students are “held accountable for everything [they] do.” This culture of accountability, though, exists alongside a concurrent culture of care. That is, staff described the school as being “like a family,” where the teachers “connect with students where they are at” to build relationships with students. They said that they work hard to build rapport with students and their families and to form connections with students both in and out of school.

Other comments reflected the culture from the perspective of educators themselves. One participant shared that the biggest culture change across recent years has been a change from teachers feeling a fear of retribution if they made a mistake to a current culture of empowerment, where they can take a risk and know that they are allowed to make mistakes. Another participant’s comments echoed this claim, as this person noted that staff members feel supported by school and district leadership. In turn, the participants described an environment in which teachers work hard, or in the words of one participant, “people put in the time.” School staff noted that they take “a lot of pride” in what they do and that they are “perfectionists” who perceive their work to be “exciting and challenging and fun.”

Student Performance

WRHS students’ performance on state assessments has improved over the past several years (Table 3). Specifically, the percentage of students who scored at or above proficient on the state summative assessment increased 35 percentage points between the 2013-14 and 2018-19 school years. While the school continues to make efforts toward the BHAG noted above, recent improvements have made inroads toward that objective.

Table 3. Percent of Wind River High School students who scored at or above the proficient level on the state summative assessment: School years 2013-14 through 2018-19

Year	Percent of students at proficient or above
2013-14	23
2014-15	31
2015-16	25
2016-17	24
2017-18	45
2018-19	58

Note: Wyoming has changed its summative assessment in recent years and began giving the current test (the Wyoming Test of Proficiency and Progress, or WY-TOPP) in 2017-18. Accordingly, the data for these calculations come from different assessments over time (e.g., the formerly used Proficiency Assessments for Wyoming Students [PAWS] and the WY-TOPP). While changes in test administration make cross-year comparisons more difficult, using data from multiple assessments allows for review of scores over a longer time period.

Source: Data provided to study team by the Wyoming Department of Education.

Additionally, in 2018-19, the school's overall graduation rate was nearly ninety percent (Table 4), and it was high for several subgroups. For example, all of the Native American students in the 2018-19 cohort who were expected to graduate did so.

Table 4. Federal four-year graduation rates for Wind River High School, by student characteristics: 2018-19 cohort

Student characteristic	Graduation rate
All students	88
English language learners	-
Gender	
Female	95
Male	79
Homeless students	-
Eligible for free or reduced-price lunch	87
Migrant students	-
Race/ethnicity	
American Indian	-
Asian	-
Black	-
Hispanic	-
Pacific Islander	-
Two or more races	-
White	86

- Data not reported to protect student confidentiality.

Note: A cohort year is a grouping of students expected to graduate on-time (4 years) at the end of the same school year (the cohort year in this table is 2018-19). The bulk of each cohort consists of all the Wyoming students entering 9th grade in the same year, which is then adjusted for students transferring in and out of state. The four-year graduation rate is the percentage of students in a cohort graduating in 4 or fewer years.

Source: Wyoming Department of Education, "Wyoming School Graduation Rates: Federal Graduation Rates for the 2018-19 Cohort."

School Staff

According to data from the Wyoming Department of Education, the average salary for a high school teacher in Fremont County School District #6 in 2019-20 was \$64,294, which was similar to average salaries for high school teachers across the state (\$64,893).⁶¹

⁶¹ Data for Fremont County School District #6 retrieved from the "All Staff by Category and District with Average Salaries" database found at <https://edu.wyoming.gov/data/statisticalreportseries-2/>. Data for Wyoming retrieved from "State Staff by Category with Average Salaries" at the same site.

Table 5. Wind River High School staffing levels, 2019-20

Category	FTE
<i>Licensed staff</i>	
Core teachers	7.50
Elective teachers	2.67
Career and technical education teachers	2.17
Instructional facilitator	1.00
Special education self-contained teachers (severe & profound)	1.00
Special education teachers	1.00
<i>Non-licensed staff</i>	
<i>Aides</i>	
Special education self-contained paraprofessionals (severe & profound)	1.00
Special education paraprofessionals	2.00
Library paraprofessionals	0.50
<i>Administration</i>	
Principal	0.50
Director of student services	0.50
Clerical	2.00
<i>Pupil Support</i>	
Counselor	0.50
Nurse	approximately 0.20
Social worker	approximately 0.30
School resource officer	0.50

Source: Conversations with Wind River High School staff.

As noted in the section on school context, WRHS shares a building with the middle school, and several staff members teach at both levels. WRHS has 7.5 teaching positions in core subject areas (two for ELA, two for math, two for science, one for social studies, and 0.5 of an FTE for foreign language) and a total of just under 5 FTE positions for electives, and career and technical education (CTE): 2.67 positions in elective areas (2.5 FTE for art, music, and physical education, plus an additional portion of an FTE for an instructor who teaches one period of chorus) and 2.17 positions in CTE (2 FTEs covering the topics of woodworking, agriculture, and welding, plus an additional portion of an FTE for an instructor who teaches one period of computer science). WRHS instructional staff receive support from an educator the school calls a “student success coordinator,” who is similar to an instructional facilitator. This student success coordinator performs activities such as instructional coaching, course development, management of the senior capstone program (including the internship component), and management of the dual enrollment program.

Two teachers and three paraprofessionals work with students who have special needs. The school does not have any English as a second language (ESL) teachers, but interview participants noted that the school receives support as needed from a district staff member, who helps support ELL students. The school has no interventionists and no certified librarian, though the school employs a library staff member called a “student center specialist” who serves the middle and high school. In the 2019-20 school year, this library staff member was a full-time substitute.

The school’s principal works across grades 6 through 12, and as such, is at the high school for about 0.5 FTE. He is joined by a “director of student services,” who is similar to an assistant principal or a dean of students. The director of student services oversees interventions, tracks attendance, and addresses student behavior issues. Two clerical staff (a secretary and a registrar/attendance person) support the administration.

The high school has half of a guidance counselor position and access to a nurse who works in the district’s three schools (across kindergarten through grade 12). The school also has access to two social workers, both of whom are supported by district funds. One social worker works full-time for grades K-12 and is at the high school about three or four hours per week. The second person is contracted with the district and comes to the school one day per week. Finally, one school resource officer, whose compensation comes from the district, works at the middle/high school campus.

A study participant noted that retention has been a challenge historically, as the school often loses teachers to larger communities outside of the district. The school has actively worked to address turnover in recent years by supporting teachers in finding housing, fostering community, and implementing a formal new teacher mentorship program (discussed in more detail in the section on professional development). Additionally, the principal meets regularly with new staff.

School Schedule

The student day runs from 8:10 am through 3:40 pm and contains seven class periods. All students have a 30-minute intervention period in the afternoon. Teachers have six instructional periods and one non-instructional period, which they use for activities such as lesson planning or grading. Teachers come before school and stay afterschool for duties, coaching, or meetings. One staff member noted that the teachers were “dedicated” and would come to school early and stay late.

School is in session four days a week (Monday through Thursday), and school personnel explained that these days are for uninterrupted instructional time. One Friday of each month is “Fun Friday,” during which time the students come to school for interventions or to participate in special programming (examples include a day dedicated to learning about Native American culture, another day where the students learned from professors and other professionals, and another day with FFA competitions).⁶² Students do not come to school the other Fridays of the month. Teachers are at school for additional Fridays each month, although they usually have one or two Fridays per month off. When the teachers

⁶² According to a study participant, this is a fairly new arrangement. In the past, the school had a typical four-day week. Approximately two or three years ago, the school adopted a modified four-day week that included an occasional fifth day that was like a regular day of school. The school found that model to be unsuccessful and shifted to the “Fun Friday” model.

are at the school, they participate in various professional development activities (described in more detail below in the section on professional development).

Approaches to Curriculum, Instruction, Intervention, and Assessment

Curricular Program

WRHS offers a variety of courses in core and elective subjects as well as career and technical education. In addition to offering courses at the secondary level, the school offers some postsecondary courses (concurrent or dual credit), and the ELA program includes a senior capstone course that all students are required to take.

According to the 2019-20 Wind River High School handbook, students must obtain the following credits to graduate:

- Four credits of English
- Four credits of math
- Three credits of science
- Three credits of social studies
- One credit of physical education/health
- One credit of fine arts
- Two credits of career and technical education
- Seven credits of electives.⁶³

Teachers' selection of curriculum happens in multiple ways. That is, teachers, either collaboratively or individually, select extant resources or create their own materials. One common thread with respect to curriculum selection is that curricular materials must tie to standards. Another common thread is the use of a wide variety of materials rather than reliance on single textbooks, particularly in areas such as ELA, science, social studies, and career and technical education. For example, study participants in these subject areas noted that they perceive existing textbooks to be limited and not adequately tied to standards. Thus, they are "not married to any specific text" but rather gather materials from many sources in order to ensure that they cover everything they need to cover. For example, ELA and science teachers create their own material and draw material from former textbooks. The social studies curriculum relies on materials from online sources from the Teachers Curriculum Institute as well as Dave Ramsey economics material. Career and technical education courses rely on materials from Vex Robotics, the American Welding Society's SENSE program, and CEV multimedia. In math, the school uses Pearson enVision for algebra I, geometry, and algebra II. The school recently adopted Pearson's enVision math curriculum, and participants noted that they made the switch because they did not perceive the previous integrated math curriculum to be adequately tied to standards.

Instructional Program

Interviews and focus groups with school staff highlighted three school-wide themes with respect to instruction. First, the use of co-teaching exists in multiple content areas. For example, two English

⁶³ Electives include courses in the aforementioned subject areas as well as a small number of credits available for proficiency/advanced proficiency on state assessments in math, reading, and writing as well as completion of Upward Bound programs.

teachers have used a co-teaching model for one of their courses for ten years, and they perceive that the use of this model has allowed them to support struggling students much more deeply. Additionally, the math program uses both a teacher and a paraprofessional in order to allow for targeted instruction for struggling learners.

Second, teachers who participated in focus groups described varied approaches to instruction, but a common refrain in these conversations was the use of student collaboration, student discussion, projects, or other hands-on types of learning activities. Descriptions of hands-on or participatory learning activities spanned across all subject areas.

Third, school staff consistently described a heavy emphasis on student persistence with respect to assignments. Again, across all subject areas, teachers reported that they do not accept zeros for assignments. Instead, they require that students complete all work no matter how delayed. Participants noted that school staff refer to this process as “ZAP,” or “zeroes aren’t permitted.” Additionally, teachers reported that they emphasize revisions and study participants described instructional approaches that require students to revise and resubmit assignments until the work demonstrates full comprehension.

Interventions for Struggling Students

Academic Interventions

A few years ago, the school instituted a 30-minute flex period for all students. During this time, students receive interventions. Typically, on a weekly basis, teachers select specific students who need additional support in their classes. Usually, teachers work with the same students for the whole week. Students who do not need targeted assistance at any given time have the opportunity to participate in extended learning or enrichment opportunities. Additional school-wide opportunities for intervention occur on Fun Fridays, when students who are struggling to meet standards receive intervention.

Alongside these structured, school-wide times for intervention are other opportunities or requirements for intervention that are extended to students on an as-needed basis. For example, WRHS offers a year-long math lab class, which runs concurrently with the algebra I course for students who struggle to grasp the algebra concepts. Additionally, as noted above, the school has a ZAP philosophy with regard to missing work. Under this practice, students who fail to turn in work have to use their free time to finish this work.

Behavioral Interventions

In about 2015, the district established a separate school called the Wind River Learning Academy to serve as an alternative school for students who have experienced traumatic life events and, as a result, are struggling with the behavior requirements of learning in a traditional setting. This alternative school is a separate entity from WRHS and serves a very small number (e.g., four to five) of students per year. Most of the courses are online and may be dual enrollment/dual credit, but the students come to WRHS for some courses. A study participant noted that this school has been instrumental in helping those students succeed and perceives the school to be part of WRHS success, although the Learning Academy is formally a separate school.

Assessments

As noted above, school staff are very focused on standards, and this focus extends to the use of assessments. At the course level, where possible – that is, when multiple teachers offer the same course – teachers work together to determine what level of work constitutes proficiency on the standards and to create or select assessments that measure proficiency. For instance, science teachers share lab assignments, and math teachers collectively use Pearson enVision assessments.

Educators at WRHS also use results from other tests, such as the WY-TOPP interim assessments, the ACT, and the summative WY-TOPP to make decisions related to curriculum, instruction, and intervention. For example, school staff described that they use information from the summative WY-TOPP to determine how to improve practice from year-to-year, and they use interim assessments to make mid-year corrections.

Professional Development

WRHS teachers described wide access to a variety of professional development opportunities. These opportunities range from attendance at conferences specific to teachers' content area, school-based professional development sessions with external experts, and school-based professional development where WRHS teachers share their expertise with each other. They also described growth and collaboration through PLCs, which meet once per week before school.

In-school professional development is rich, collaborative, and targeted at specific WRHS needs. For about the past two years, the school has had a leadership team made up of four teachers. This leadership team leads professional development and makes decisions about the school. The teachers described the school-based professional development – which sometimes happens as K-12 and sometimes happens as 6-12 – as an opportunity to collaborate with colleagues on things like shared goals, assessments, state reporting, and the school improvement plan. For instance, they described that this year, the Friday professional development days focused on the principles of assessment, and the teachers learned together from members of their school's leadership team, who went to external PD and brought the knowledge back to their school.

WRHS also invests heavily in support for new teachers, particularly through the use of a mentoring program. All new teachers in the district get a mentor who is assigned to the new teacher for the whole year. If possible, the mentor teacher is in the same subject area as the new teacher. Study participants reported some degree of variation in their experiences with the mentorship program, but as a whole, they described working with their colleagues both formally and informally and engaging in activities like one-on-one meetings, classroom observations, and co-teaching. Additionally, teachers noted that new teachers meet with the principal regularly (often weekly) during their first semester at the school.

Summary and Alignment with the Evidence-Based Model

Between the 2013-14 and 2018-19 school years, the percentage of WRHS students who scored at or above proficient on the state summative assessment increased 35 percentage points.⁶⁴ This increase is likely the result of many factors, and this study is not designed to identify these specific factors. What

⁶⁴ Please note that the state summative test changed during this time period. See the note on Table 3 for additional information.

this study does is illuminate the context in which these improvements occurred. Interviews and focus groups with school staff members illustrated a context where staff maintain high expectations for all students and hold students accountable for completing all assignments and submitting high-quality work. WRHS teachers reported a concerted effort to identify curricular materials that are aligned to standards, and educators administer common assignments and assessments when possible. Many intervention opportunities exist at the school; specifically, WRHS invests time daily to provide interventions to struggling students and dedicates one Friday a month to remediation and extra instructional assistance as well. WRHS teachers, too, receive several opportunities for growth, both in the form of wide-ranging professional development and a mentorship program designed to support teachers who are new to the district.

Investigations into how the school operates indicates areas of alignment and divergence with the Evidence-Based (EB) Model. In terms of alignment, WRHS staff engage in the following activities:

- Setting ambitious goals (in this case, the “BHAG” of universal proficiency)
- Using common curriculum and common assessments when possible (for example, using a coordinated math curriculum)
- Implementing collaborative professional development through the use of PLCs and instructional coaching (here, from the “student success coordinator”)
- Relying on strong leadership to make data-based decisions (at WRHS, this leadership stems not only from the principal but also from the leadership team)
- Providing sustained opportunities for extra help for struggling students (here, with the flex period).

The school’s staffing diverges from both the EB and Wyoming Legislative Models with respect to core, elective, and CTE teacher positions. The EB and Legislative Models would provide 7 and 10 FTEs for teachers, respectively, whereas in practice WRHS had 12.3 FTEs in core, elective, and CTE positions in the 2019-20 school year.